



MATERIAL SAFETY DATA SHEET

Identity

MSDS # 101

AR 600 and 700 Series; GL 600 and 700 Series; GO 100 Series; SY 553; SY 554; 20000 Series
Dipping Glaze AR 600 and 700 Series; GL 600 and 700 Series

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

Health 3 Reactivity 0
Fire 0 Protective Equip. F
(if spraying)

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared

July 1987

Revised

March 1, 1999

Prepared By

Scott Mattison

SECTION II

HAZARDOUS INGREDIENTS

Hazardous Components

Silica, Crystalline-Quartz

OSHA PEL

1.5 mg/m³

ACGIH TLV

1.0 mg/m³

CAS #

14808-60-7

%

Up to 8

Frit is a fused silicate glass substance. The components of this glass product listed below are from the inventory of potentially hazardous substances referenced by FED/OSHA in 29 CFR 1910.1200.

Components

Lead compounds, as Pb
Barium compounds, as Ba

OSHA PEL

0.05 mg/m³
0.5 mg/m³

ACGIH TLV

0.15 mg/m³
0.5 mg/m³

Other Information

Frits are produced from the chemical reactions which occur during the high temperature smelting of various raw materials to form a molten glass. This glass is rapidly cooled and then ground to produce powdered frit. The lead listed for this product is incorporated into the glass structure of the frit, chemically reacted in the form of silicates of other essentially insoluble complexes. Exposure to the hazardous ingredients can occur if spray mist is inhaled or glaze ingested and the ingredient dissolves out of the glass. Because of the chemical stability of frit and its resistance to attack by acids or alkali, this is anticipated to occur very slowly. This product contains the following component(s) that require reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act, also known as Title III of SARA (the Superfund Amendments and Reauthorization Act), and 40 CFR Part 372:

COMPONENT

Lead compounds
Barium compounds

PERCENT PRESENT^(a)

Up to 28% (as PbO)
Up to 5% (as BaO)

(a) The percent reported is based on the theoretical composition of this frit. While existing in theory, the component(s) mentioned are only present as part of FRIT (CAS #65997-18-4*).

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)

212°F

Melting Point, (DEG°F)

1800°F

Specific Gravity (Water=1):

1.7

Appearance And Odor

Colored liquid. Odorless

pH

n/a

Vapor Pressure, (MM HG.)

n/a

Vapor Density (AIR=1)

n/a

Water Solubility, %

Insoluble

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

n/a

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

n/a

Special Fire Fighting Procedures

None. Will not burn.

Unusual Fire And Explosion Hazards

None.

SECTION V
REACTIVITY DATA

| | | |
|--|-------------------|--------------------------|
| Stability | Unstable: | Stable: X |
| Conditions To Avoid | | |
| n/a | | |
| Incompatibility (Materials To Avoid) | | |
| n/a | | |
| Hazardous Decomposition or Byproducts | | |
| n/a | | |
| Hazardous Polymerization | May Occur: | Will Not Occur: X |
| Conditions To Avoid | | |
| n/a | | |

SECTION VI
HEALTH HAZARD DATA

| | | | |
|--|------------------------|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? yes | Skin? no | Ingestion? yes |
| Health Hazards (Acute and Chronic) | | | |
| Overexposure to lead may cause nervous system, kidney or bone marrow damage or harm to the developing fetus. | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| Symptoms of overexposure to lead includes weight loss, stomach cramps, loss of coordination, joint and muscle pains. | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasive, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: Flush with water at least 15 minutes. | | | |
| Skin contact: Wash with soap and water. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

When using, do not eat, drink, or smoke. Wash hands immediately after use. Keep sealed. Keep out of reach of children.

Other Precautions

Avoid using if pregnant or contemplating pregnancy.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

Use a NIOSH approved dust and mist respirator for lead such as 3m 8710 or equivalent.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Recommended when spraying

Protective Gloves

no

Special

Use respirator when spraying

Other**Eye Protection**

yes

Other Protective Clothing Or Equipment

If in the glaze form and applying by spray, use spray booth and respiratory. Clean spray booth filters often.

Work/Hygienic Practices

Wear protective clothing that is removed before eating, drinking, smoking, or leaving work. Wash thoroughly, immediately after spraying.

If glaze spraying regular blood lead level testing is advisable.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

CAUTION**CONFORMS TO
ASTM D-4236**

"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity

MSDS # 102

GL 614, GL 632, GL 637, GL 658, GL 670; GO 123, GO 134, GO 135, GO 136, and GO 137

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

Health 3 Reactivity 0
Fire 0 Protective Equip. F
(if spraying)

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared Revised
August 1, 1987 March 1, 1999

Prepared By
Scott Mattison

SECTION II

HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|----------------------------|-----------------------|-----------------------|------------|---------|
| Silica, Crystalline-Quartz | 1.5 mg/m ³ | 1.0 mg/m ³ | 14808-60-7 | Up to 8 |

Frit is a fused silicate glass substance. The components of this glass product listed below are from the inventory of potentially hazardous substances referenced by FED/OSHA in 29 CFR 1910.1200.

| Components | OSHA PEL | ACGIH TLV |
|--------------------------|------------------------|------------------------|
| Lead compounds, as Pb | 0.05 mg/m ³ | 0.15 mg/m ³ |
| Cadmium compounds, as Cd | 0.2 mg/m ³ | 0.05 mg/m ³ |
| Barium compounds, as Ba | 0.5 mg/m ³ | 0.5 mg/m ³ |

Other Information

Frits are produced from the chemical reactions which occur during the high temperature smelting of various raw materials to form a molten glass. This glass is rapidly cooled and then ground to produce powdered frit. The lead listed for this product is incorporated into the glass structure of the frit, chemically reacted in the form of silicates of other essentially insoluble complexes. Exposure to the hazardous ingredients can occur if spray mist is inhaled or glaze ingested and the ingredient dissolves out of the glass. Because of the chemical stability of frit and its resistance to attack by acids or alkali, this is anticipated to occur very slowly. This product contains the following component(s) that require reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act, also known as Title III of SARA (the Superfund Amendments and Reauthorization Act), and 40 CFR Part 372:

| COMPONENT | PERCENT PRESENT ^(a) |
|-------------------|--------------------------------|
| Lead compounds | Up to 28% (as PbO) |
| Cadmium compounds | Up to 7 % (as CdO) |
| Barium compounds | Up to 5% (as BaO) |

(a) The percent reported is based on the theoretical composition of this frit. While existing in theory, the component(s) mentioned are only present as part of FRIT (CAS #65997-18-4*).

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)

212°F

Melting Point, (DEG°F)

1800°F

Specific Gravity (Water=1):

1.7

Appearance And Odor

Colored liquid. Odorless

pH

n/a

Vapor Pressure, (MM HG.)

n/a

Vapor Density (AIR=1)

n/a

Water Solubility, %

Insoluble

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

n/a

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Extinguishing Media

n/a

Flammable Limits

LEL n/a

UEL n/a



MATERIAL SAFETY DATA SHEET

Identity
AN 313; 20088

MSDS # 103

SECTION I

Manufacturer's Name
Duncan Enterprises
Address
5673 E. Shields Ave.
Fresno, CA 93727
HMIS Codes
Health 3 Reactivity 0
Fire 0 Protective Equip. F
(if spraying)

Emergency Telephone Number
(559) 291-4444
Telephone Number
(559) 291-4444
Date Prepared Revised
July 1987 March 1, 1999
Prepared By
Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|----------------------------|-----------------------|-----------------------|------------|-----------|
| Silica, Crystalline-Quartz | 0.1 mg/m ³ | 0.1 mg/m ³ | 14808-60-7 | Up to 8 |
| Cobalt Oxide | 0.1 mg/m ³ | 0.1 mg/m ³ | 1307-96-6 | < than 1% |

Frit is a fused silicate glass substance. The components of this glass product listed below are from the inventory of potentially hazardous substances referenced by FED/OSHA in 29 CFR 1910.1200.

| Components | OSHA PEL | ACGIH TLV |
|-----------------------|------------------------|------------------------|
| Lead compounds, as Pb | 0.05 mg/m ³ | 0.15 mg/m ³ |

Other Information

Frits are produced from the chemical reactions which occur during the high temperature smelting of various raw materials to form a molten glass. This glass is rapidly cooled and then ground to produce powdered frit. The lead listed for this product is incorporated into the glass structure of the frit, chemically reacted in the form of silicates of other essentially insoluble complexes. Exposure to the hazardous ingredients can occur if spray mist is inhaled or glaze ingested and the ingredient dissolves out of the glass. Because of the chemical stability of frit and its resistance to attack by acids or alkali, this is anticipated to occur very slowly. This product contains the following component(s) that require reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act, also known as Title III of SARA (the Superfund Amendments and Reauthorization Act), and 40 CFR Part 372:

| COMPONENT | PERCENT PRESENT ^(a) |
|----------------|--------------------------------|
| Lead compounds | Up to 29% (as PbO) |

(a) The percent reported is based on the theoretical composition of this frit. While existing in theory, the component(s) mentioned are only present as part of FRIT (CAS #65997-18-4*).

SECTION III PHYSICAL DATA

| | |
|-----------------------------|------------------------------------|
| Boiling Point, (DEG°F) | Vapor Pressure, (MM HG.) |
| 212°F | n/a |
| Melting Point, (DEG°F) | Vapor Density (AIR=1) |
| 1800°F | n/a |
| Specific Gravity (Water=1): | Water Solubility, % |
| 1.5 | Insoluble |
| Appearance And Odor | Freezing Point |
| Colored liquid. Odorless | n/a |
| pH | Evaporation Rate (Butyl Acetate=1) |
| n/a | n/a |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | |
|------------------------------------|----------------------|
| Flash Point (Method Used) | Flammable Limits |
| n/a | LEL n/a UEL n/a |
| Extinguishing Media | |
| n/a | |
| Special Fire Fighting Procedures | |
| None. Will not burn. | |
| Unusual Fire And Explosion Hazards | |
| None. | |

SECTION V
REACTIVITY DATA

| | | |
|--|-------------------|--------------------------|
| Stability | Unstable: | Stable: X |
| Conditions To Avoid | | |
| n/a | | |
| Incompatibility (Materials To Avoid) | | |
| n/a | | |
| Hazardous Decomposition or Byproducts | | |
| n/a | | |
| Hazardous Polymerization | May Occur: | Will Not Occur: X |
| Conditions To Avoid | | |
| n/a | | |

SECTION VI
HEALTH HAZARD DATA

| | | | |
|--|--|-----------------|-----------------------|
| Routes Of Entry | Inhalation? yes | Skin? no | Ingestion? yes |
| Health Hazards (Acute and Chronic) | | | |
| | Overexposure to lead may cause nervous system, kidney or bone marrow damage or harm to the developing fetus. Overexposure may produce allergic reaction by skin contact and lung damage by inhalation. | | |
| Carcinogenicity | | | |
| Signs And Symptoms of Exposure | | | |
| | Symptoms of overexposure to lead includes weight loss, stomach cramps, loss of coordination, joint and muscle pains. Overexposure to skin contact can cause skin rash. Overexposure by inhalation can cause shortness of breath. | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| | Abrasive, can scratch eyes. Overexposure can dry skin, or cause skin rash. | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: | Flush with water at least 15 minutes. | | |
| Skin contact: | Wash with soap and water. | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

When using, do not eat, drink, or smoke. Wash hands immediately after use. Keep sealed. Keep out of reach of children.

Other Precautions

Avoid using if pregnant or contemplating pregnancy.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

Use a NIOSH approved dust and mist respirator for lead such as 3m 8710 or equivalent.

Ventilation

Local Exhaust

Recommended

Special

Use respirator when spraying

Mechanical (General)

Other

Recommended when spraying

Eye Protection

yes

Protective Gloves

no

If in the glaze form and applying by spray, use spray booth and respiratory. Clean spray booth filters often.

Work/Hygienic Practices

Wear protective clothing that is removed before eating, drinking, smoking, or leaving work. Wash thoroughly, immediately after spraying.

If glaze spraying regular blood lead level testing is advisable.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



*Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

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MATERIAL SAFETY DATA SHEET

Identity

MSDS # 104

Nontoxic Glazes: AR 950, AR 951; AZ 100 Series; CC 100 Series; CN Series; CR 800 Series; CR 900 Series; CY 100 Series; EZ Stroke Series; FD 200 Series; GZ 101 to 117; IN 1000 to 1700 Series; OG 700 Series; RI 500 Series; SA 800 and SA 900 Series; SH 600 Series; SN 300 Series; ST 400 Series; SU 100 Series; SY 546; 20047 and 20095

Nontoxic Dipping Glazes: CN 2000D; IN 1000D to 1700D Series

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

| | |
|----------|--------------------------------------|
| Health 0 | Reactivity 0 |
| Fire 0 | Protective Equip. F (if spraying) |

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared

July 1994

Revised

November 1999

Prepared By

Scott Mattison

Hazardous Components

None

OSHA PEL

ACGIH TLV

CAS

%

Other Information

None

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)

212°F

Vapor Pressure, (MM HG.)

n/a

Melting Point, (DEG°F)

1800°F

Vapor Density (AIR=1)

n/a

Specific Gravity (Water=1):

1.3 to 1.8

Water Solubility, %

Insoluble

Appearance And Odor

Colored liquid. Odorless

Freezing Point

32°F

pH

n/a

Evaporation Rate (Butyl Acetate=1)

n/a

Flash Point (Method Used)

n/a

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

n/a

Special Fire Fighting Procedures

None. Will not burn.

Unusual Fire And Explosion Hazards

None.

SECTION V REACTIVITY DATA

Stability

Unstable:

Stable: X

Conditions To Avoid

n/a

Incompatibility (Materials To Avoid)

n/a

Hazardous Decomposition or Byproducts

n/a

Hazardous Polymerization

Conditions To Avoid

n/a

May Occur:

Will Not Occur: X

SECTION VI
HEALTH HAZARD DATA

| | | | |
|--|----------------|---------------------|--------------------|
| Routes Of Entry | Inhalation? no | Skin? no | Ingestion? yes |
| Health Hazards (Acute and Chronic) | | | |
| None. Nontoxic | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| n/a | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasive, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: Flush with water at least 15 minutes. | | | |
| Skin contact: Wash with soap and water. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Put paper towels in trash and rinse out sponge.

Precautions To Be Taken In Handling And Storing

Keep container sealed.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If spraying, do not inhale mist. Use respirator that is NIOSH approved for sprays and mists.

Ventilation**Local Exhaust**

Recommended

Special

Use respirator when spraying

Mechanical (General)**Other**

None

Recommended when spraying

Eye Protection

yes

Protective Gloves

no

Other Protective Clothing Or Equipment

None needed

Work/Hygienic Practices

Good hygiene practices should be followed.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA Proposition 65 n/a

*Products bearing the Nontoxic Product Seal are certified in a program of toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c).

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity GL 1609; SY 1024 & SY 1025
Dipping Glaze GL 1609D **MSDS # 105**

SECTION I

Manufacturer's Name Duncan Enterprises
Address 5673 E. Shields Ave.
Fresno, CA 93727
HMIS Codes
Health 3 Reactivity 0
Fire 0 Protective Equip. F
(if spraying)

Emergency Telephone Number
(559) 291-4444
Telephone Number
(559) 291-4444
Date Prepared July 1987 **Revised** March 1, 1999
Prepared By Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|-----------------------------|-----------------|------------------|--------------|-------------------|
| Copper (II) Oxide | ----- | ----- | 1317-38-0 | Up to 7% (as CuO) |

This product contains the following component(s) that require reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act, also known as Title III of SARA (the Superfund Amendments and Reauthorization Act), and 40 CFR Part 372.

SECTION III PHYSICAL DATA

| | |
|--|--|
| Boiling Point, (DEG°F) 212°F | Vapor Pressure, (MM HG.) n/a |
| Melting Point, (DEG°F) 1800°F | Vapor Density (AIR=1) n/a |
| Specific Gravity (Water=1): 1.5 | Water Solubility, % Insoluble |
| Appearance And Odor Colored liquid. Odorless | Freezing Point n/a |
| pH n/a | Evaporation Rate (Butyl Acetate=1) n/a |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | |
|---|---|
| Flash Point (Method Used) n/a | Flammable Limits LEL n/a UEL n/a |
| Extinguishing Media n/a | |
| Special Fire Fighting Procedures None. Will not burn. | |
| Unusual Fire And Explosion Hazards None. | |

SECTION V REACTIVITY DATA

| | | |
|---|------------|-------------------|
| Stability | Unstable: | Stable: X |
| Conditions To Avoid n/a | | |
| Incompatibility (Materials To Avoid) n/a | | |
| Hazardous Decomposition or Byproducts n/a | | |
| Hazardous Polymerization | May Occur: | Will Not Occur: X |
| Conditions To Avoid n/a | | |

SECTION VI
HEALTH HAZARD DATA

| | | | |
|--|---|---------------------|--------------------|
| Routes Of Entry | Inhalation? yes | Skin? no | Ingestion? yes |
| Health Hazards (Acute and Chronic) | | | |
| | Overexposure may cause enlargement of the liver, jaundice and kidney damage. | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| | Discoloration of the skin. Irritation of the eyes or upper respiratory track, vomiting, gastric pain, dizziness, exhaustion, anemia and cramps. | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| | Abrasive, can scratch eyes. Overexposure can dry skin, or cause skin rash or upper respiratory track irritation. | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: | Flush with water at least 15 minutes. | | |
| Skin contact: | Wash with soap and water. | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

When using, do not eat, drink, or smoke. Wash hands immediately after use. Keep sealed. Keep out of reach of children.

Other Precautions

Avoid using if pregnant or contemplating pregnancy.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

Use a NIOSH approved dust and mist respirator for lead such as 3m 8710 or equivalent.

Ventilation

Local Exhaust

Recommended

Special

Use respirator when spraying

Mechanical (General)

Recommended when spraying

Other

Protective Gloves

no

Eye Protection

yes

Other Protective Clothing Or Equipment

If in the glaze form and applying by spray, use spray booth and respiratory. Clean spray booth filters often.

Work/Hygienic Practices

Wear protective clothing that is removed before eating, drinking, smoking, or leaving work. Wash thoroughly, immediately after spraying.

If glaze spraying regular blood lead level testing is advisable.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

n/a



"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity

MSDS # 106

High-Fire Glazes HF 500 Series

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

Health 0 Reactivity 0
Fire 0 Protective Equip. F
(if spraying)

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared Revised
July 1994 April 1, 1999

Prepared By
Scott Mattison

Hazardous Components

None

Other Information

None

OSHA PEL

HAZARDOUS INGREDIENTS

ACGIH TLV

CAS #

%

SECTION III
PHYSICAL DATA

Boiling Point, (DEG°F)
212°F

Vapor Pressure, (MM HG.)
n/a

Melting Point, (DEG°F)
1800°F

Vapor Density (AIR=1)
n/a

Specific Gravity (Water=1):
1.3 to 1.8

Water Solubility, %
Insoluble

Appearance And Odor
Colored liquid. Odorless

Freezing Point
32°F

pH
n/a

Evaporation Rate (Butyl Acetate=1)
n/a

Flash Point (Method Used)
n/a

Flammable Limits
LEL n/a UEL n/a

Extinguishing Media
n/a

Special Fire Fighting Procedures
None. Will not burn.

Unusual Fire And Explosion Hazards
None.

SECTION IV
FIRE AND EXPLOSION HAZARD DATA

Stability

Unstable: Stable: X

SECTION V
REACTIVITY DATA

Conditions To Avoid
n/a

Incompatibility (Materials To Avoid)
n/a

Hazardous Decomposition or Byproducts
n/a

Hazardous Polymerization
Conditions To Avoid

May Occur: Will Not Occur: X

n/a

SECTION VI
HEALTH HAZARD DATA

| | | | |
|---|-----------------------|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? no | Skin? no | Ingestion? yes |
| Health Hazards (Acute and Chronic) | | | |
| None. Nontoxic | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| n/a | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasive, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: Flush with water at least 15 minutes. Skin contact: Wash with soap and water. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Put paper towels in trash and rinse out sponge.

Precautions To Be Taken In Handling And Storing

Keep container sealed.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If spraying, do not inhale mist. Use respirator that is NIOSH approved for sprays and mists.

Ventilation**Local Exhaust**

Recommended

Special

Use respirator when spraying

Other

None

Eye Protection

yes

Protective Gloves

no

Other Protective Clothing Or Equipment

None needed

Work/Hygienic Practices

Good hygiene practices should be followed.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA Proposition 65 n/a



*Products bearing the Nontoxic Product Seal are certified in a program of toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c).

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity

Red Coat Underglaze RC 200 Series

MSDS # 204

Manufacturer's Name
Duncan Enterprises

Address
5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes
Health 1 Reactivity 0
Fire 0 Protective Equip. F
(if spraying)

SECTION I

Emergency Telephone Number
(559) 291-4444
Telephone Number
(559) 291-4444
Date Prepared July 1987 **Revised** March 1, 1999
Prepared By
Scott Mattison

SECTION II

HAZARDOUS INGREDIENTS

Frit is a fused silicate glass substance. The components of this glass product listed below are from the inventory of potentially hazardous substances referenced by FED/OSHA in 29 CFR 1910.1200.

| Components | OSHA PEL | ACGIH TLV |
|--------------------------|-----------------------|------------------------|
| Cadmium compounds, as Cd | 0.2 mg/m ³ | 0.05 mg/m ³ |
| Barium compounds, as Ba | 0.5 mg/m ³ | 0.5 mg/m ³ |

Other Information

Frits are produced from the chemical reactions which occur during the high temperature smelting of various raw materials to form a molten glass. This glass is rapidly cooled and then ground to produce powdered structure of the frit. The Cadmium and Barium listed for this product is incorporated into the glass structure of the frit, chemically reacted in the form of silicates of other essentially insoluble complexes. Exposure to the hazardous ingredient dissolves out of the glass. Because of the chemical stability of frit and its resistance to attack by acids or alkali, this is anticipated to occur very slowly. This product contains the following component(s) that require reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act, also known at Title III of SARA (the Superfund Amendments and Reauthorization Act), and 40 CFR Part 372:

| COMPONENT | PERCENT PRESENT ^(a) |
|-------------------|--------------------------------|
| Cadmium compounds | Up to <5 % (as CdO) |
| Barium compounds | Up to <11% (as BaO) |

(a) The percent reported is based on the theoretical composition of this frit. While existing in theory, the component(s) mentioned are only present as part of FRIT CAS #65997-18-4*.

SECTION III

PHYSICAL DATA

| | |
|---|--|
| Boiling Point, (DEG°F) 212°F | Vapor Pressure, (MM HG.) n/a |
| Melting Point, (DEG°F) 1800°F | Vapor Density (AIR=1) n/a |
| Specific Gravity (Water=1): 1.6 | Water Solubility, % Insoluble |
| Appearance And Odor Colored paste. Odorless | Freezing Point n/a |
| pH n/a | Evaporation Rate (Butyl Acetate=1) n/a |

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

| | |
|---|---|
| Flash Point (Method Used) n/a | Flammable Limits LEL n/a UEL n/a |
| Extinguishing Media n/a | |
| Special Fire Fighting Procedures None. Will not burn. | |
| Unusual Fire And Explosion Hazards None. | |

**SECTION V
REACTIVITY DATA**

| | | |
|--|-------------------|--------------------------|
| Stability | Unstable: | Stable: X |
| Conditions To Avoid | | |
| n/a | | |
| Incompatibility (Materials To Avoid) | | |
| n/a | | |
| Hazardous Decomposition or Byproducts | | |
| n/a | | |
| Hazardous Polymerization | May Occur: | Will Not Occur: X |
| Conditions To Avoid | | |
| n/a | | |

**SECTION VI
HEALTH HAZARD DATA**

| | | | |
|--|-----------------------|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? no | Skin? no | Ingestion? yes |
| Health Hazards (Acute and Chronic) | | | |
| None. Nontoxic | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| n/a | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasive, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact : Flush with water at least 15 minutes. | | | |
| Skin contact: Wash with soap and water. | | | |

**SECTION VII
PRECAUTIONS FOR SAFE HANDLING****Steps To Be Taken In Case Material Is Released Or Spilled**

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Put paper towels in trash and rinse out sponge.

Precautions To Be Taken In Handling And Storing

Keep container sealed.

Other Precautions

n/a

**SECTION VIII
CONTROL MEASURES****Respiratory Protection (Specify Type)**

If spraying, do not inhale mist. Use respirator that is NIOSH approved for sprays and mists.

Ventilation**Local Exhaust**

Recommended

Special

Use respirator when spraying

Mechanical (General)**Other**

None

Recommended when spraying

Eye Protection

yes

Protective Gloves

no

Other Protective Clothing Or Equipment

None needed

Work/Hygienic Practices

Good hygiene practices should be followed.

**SECTION IX
ADDITIONAL INFORMATION****CALIFORNIA PROPOSITION 65**

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236.

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity

Bright Gold OG 801

MSDS # 301

SECTION I

Manufacturer's Name

Cookson Matthey Ceramics, Inc.

Address

1397 King Road
West Chester, PA 19380

Emergency Telephone Number

(610) 648-8185

Telephone Number

(610) 648-8100

Date Prepared Revised

September 1987 September 2000

Prepared By

Scott Mattison

SECTION II
HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|-----------------------------------|-----------------------|-----------------------|-----------|-------|
| *Aromatic Hydrocarbon | 0.2 ppm | 0.2 ppm | ----- | 1-5 |
| TSRN 80100419-5011p | | | | |
| *Organo Chromium Cmpd. (as Cr) | 0.5 mg/m ³ | 0.5 mg/m ³ | ----- | <1 |
| Cyclohexanol | 50 ppm | 50 ppm | 108-93-0 | 15-20 |
| Cyclohexanone | 50 ppm | 25 ppm | 108-94-1 | 5-10 |
| Ethyl Acetate | 400 ppm | 400 ppm | 141-78-6 | 1-5 |
| Xylene | 100 ppm | 100 ppm | 1330-20-7 | ----- |

Other Information

'C) Ceiling Limit Value

*Withheld as a trade secret.

SECTION III
PHYSICAL DATA

Boiling Point, (DEG°F)

n/a

Melting Point, (DEG°F)

n/a

Specific Gravity (Water=1):

Greater than 1

Appearance And Odor

Red liquid with solvent odor.

pH

n/a

Percent Volatile by Volume (%):

Not less than 35%

Vapor Pressure, (MM HG.)

n/a

Vapor Density (AIR=1)

Heavier than 1

Water Solubility, %

Insoluble

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

Slower than 1

SECTION IV
FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

108°F (Setaflash Closed Cup)

Extinguishing Media

CO₂, dry chemical or Chemical Foam. Water may be ineffective, but may be used to control exposed containers.

Special Fire Fighting Procedures

Fire Fighters should wear NIOSH/MSHA approved pressure demand self contained breathing apparatus.

Unusual Fire And Explosion Hazards

Toxic fumes of metals and vapors may be evolved in a fire.

Flammable Limits

LEL n/a

UEL n/a

Stability

Unstable:

Stable: X

Conditions To Avoid

Avoid heating substance where it may be inhaled, open flames, oxidizers and sources of ignition. Solvent vapors are heavier than air and can accumulate, travel to sources of ignition and flash back.

Incompatibility (Materials To Avoid)

Oxidizers such as chlorates, perchlorates, permanganates, and nitrates. If the preparation comes into contact with ammonia, explosive gold compounds may be formed. Ammoniacal gold solutions should never be stored.

Hazardous Decomposition or Byproducts

Carbon dioxide, carbon monoxide, hydrochloric acid, oxides of sulfur and carbonaceous fumes.

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry

Inhalation? yes

Skin? yes

Ingestion? no

Health Hazards (Acute and Chronic)

Short term liquid or vapor contact may result in slight eye irritation. Prolonged and repeated contact may be more irritating. Prolonged and liquid contact can cause defatting and drying of the skin., which may result in skin irritation and dermatitis. Solvents can act as Central Nervous System depressants, exhibiting narcotic and anesthetic effects. Overexposure to some of these components may cause headaches, nausea, vomiting, drowsiness, diarrhea, liver and kidney damage.

Carcinogenicity

NTP? yes

IARC Monographs? yes

OSHA Regulated? yes

Chromium Compounds

Signs And Symptoms of Exposure

See Health Hazards

Medical Conditions Generally Aggravated by Exposure

See Health Hazards

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes and contact physician immediately.

Skin contact: Wash with soap and water. Remove contaminated clothing and shoes. Wash or

Inhalation: Remove from exposure to fresh air. Give artificial respiration if not breathing.

If breathing is difficult, give oxygen. Contact a physician immediately.

Ingestion: Rinse mouth with water and give water or milk to drink. Do not induce vomiting. Contact a physician immediately.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Promptly absorb spill using inert materials such as sand, vermiculite or sawdust. Remove all sources of ignition. Cover drains to prevent entry into waterways. If a Reportable Quantity is exceeded for any ingredients, contact the National Response Center.

Waste Disposal Method

Return accumulated residues, to refinery for metals recovery. Follow local, state and federal regulations for packaging, labeling, manifesting, transportation and disposal.

Precautions To Be Taken In Handling And Storing

Keep away from , open flame, and sources of ignition. Store as flammable liquid. Store in a cool dry place. See Reactivity Section.

Other Precautions

Follow good industrial hygiene and housekeeping practices. Wash hands before eating, drinking, smoking, or applying cosmetics, and at the end of the work shift.

Avoid contact with eyes, skin, or clothing.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If there is a possibility that the TLVs or PELs may be exceeded, a NIOSH/MSHA approved respirator with organic vapor cartridge represents the minimum level of respiratory protection. To insure proper respirator selection and use, refer to the requirements of 29 CFR 1910.134 and the latest addition of ANSIZ 88.2.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Acceptable for small quantities

Special

None

Other

None

Eye Protection

Yes, safety glasses or goggles

Protective Gloves

Solvent impermeable gloves

Other Protective Clothing Or Equipment

Eye bath and safety shower.

Work/Hygienic Practices

Wear disposable protective clothing to facilitate recovery of any materials spilled. Use adequate ventilation.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Formaldehyde (gas) is know to the State of California to cause cancer.



"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

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MATERIAL SAFETY DATA SHEET

Identity
White Gold OG 802

MSDS # 302

SECTION I

Manufacturer's Name
Cookson Matthey Ceramics, Inc.
Address
1397 King Road
West Chester, PA 19380

Emergency Telephone Number
(610) 648-8185
Telephone Number
(610) 873-3200
Date Prepared September 1987 **Revised** 2/16/00
Prepared By
Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|--|-----------|-----------|-----------|-------|
| *Aromatic Hydrocarbon TSRN 80100419-5011p | 0.2 ppm | 0.2 ppm | ----- | 1-5 |
| *Organo Chromium Cmpd. (as Cr) | 0.5 mg/m3 | 0.5 mg/m3 | ----- | <1 |
| Perchloroethylene | 100 ppm | 50 ppm | 127-18-4 | 20-30 |
| Turpentine | 100 ppm | 100 ppm | 8006-64-2 | 1-5 |
| Xylene | 100 ppm | 100 ppm | 1330-20-7 | 5-10 |

Other Information
(C) Ceiling Limit Value
* Withheld as a trade secret.

SECTION III PHYSICAL DATA

| | |
|---|--|
| Boiling Point, (DEG°F) n/a | Vapor Pressure, (MM HG.) n/a |
| Melting Point, (DEG°F) n/a | Vapor Density (AIR=1) Greater than 1 |
| Specific Gravity (Water=1): Less than 1 | Water Solubility, % Insoluble |
| Appearance And Odor Dark green liquid with solvent odor | Freezing Point n/a |
| pH n/a | Evaporation Rate (Butyl Acetate=1) Slower than 1 |
| Percent Volatile by Volume (%): Not less than 35% | |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | |
|---|-------------------------|
| Flash Point (Method Used) 132°F (Staflash Closed Cup) | Flammable Limits |
| | LEL n/a UEL n/a |

Extinguishing Media

CO₂, Dry Chemical or Chemical Foam. Water may be ineffective, but may be used to cool exposed containers.

Special Fire Fighting Procedures

Fire fighters should wear self Contained Breathing Apparatus.

Unusual Fire And Explosion Hazards

Toxic fumes of metals and vapors may be evolved in a fire.

SECTION V REACTIVITY DATA

Stability Unstable: **Stable:** X

Conditions To Avoid

Avoid heating substance where it may be inhaled, open flames, oxidizers and sources of ignition. Solvent vapors are heavier than air and can accumulate, travel to sources of ignition and flash back.

Incompatibility (Materials To Avoid)

Oxidizers such as chlorates, per chlorates, permanganates, and nitrates. If the preparation comes into contact with ammonia, explosive gold compounds may be formed. Ammoniacal gold solutions should never be stored.

Hazardous Decomposition or Byproducts

CO, CO₂, HC1, oxides of sulfur and carbonaceous fumes.

Hazardous Polymerization

Conditions To Avoid

None known

May Occur:

Will Not Occur: X

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry**Toxicological Information**

There is no specific toxicological data available for this preparation. Any toxicological information is based on individual components that make up this material.

Target Organ Effects

Aromatic Hydrocarbon-Liver, skin, Central Nervous System, eyes, upper respiratory system, eyes.

Chromium Cmpds. - Skin

Perchloroethylene-Liver, kidneys, eyes, upper respiratory system, Central Nervous System, heart.

Turpentine-Skin, eyes, kidneys, respiratory system.

Xylene-Central Nervous System, eyes, GI tract, blood, liver, kidneys, skin.

Carcinogenicity

The following chemical(s) are listed as carcinogens by NTP, IARC, OSHA or all:

NTP? Chromium Compounds IARC Monographs? Perchloroethylene

Signs And Symptoms of Exposure

Eyes: Short term liquid or vapor contact may result in slight eye irritation. Prolonged and repeated contact may be more irritating.

Skin: Prolonged and repeated liquid contact can cause defatting and drying of the skin, which may result in skin irritation and dermatitis.

Inhalation: Solvents can act as Central Nervous System depressants, exhibiting narcotic and anesthetic effects. Overexposure to some of these components may cause headaches, nausea, vomiting, drowsiness, diarrhea, liver and kidney damage.

Emergency And First Aid Procedures

Eye contact : Rinse with clean water or saline solution for at least 15 minutes. Seek medical advice if irritation persists.

Skin contact: Remove contaminated clothing and wash skin with soap and water. Wash or clean before reuse.

Inhalation : Remove from exposure to fresh air. Give artificial respiration if not breathing.

If breathing is difficult, give oxygen. Contact a physician immediately.

Ingestion : Rinse mouth with water and give water or milk to drink. Do not induce vomiting. Do not give anything to an

Unconscious person. Contact a physician immediately.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Use appropriate personal protective equipment during clean up operations. Promptly absorb spill using inert materials such as sand, vermiculite or sawdust. Remove all sources of ignition and prevent from entry into drains and waterways. If a Reportable Quantity is exceeded for any ingredients, contact the National Response Center.

Waste Disposal Method

Follow all Federal, State and Local regulations for removal and disposal.

Precautions To Be Taken In Handling And Storing

Store in sealed containers in cool, dry place. Keep away from heat and sources of ignition.

Other Precautions

Do not eat, drink or smoke while using this material. Follow good industrial hygiene practices.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If there is a possibility that the TLVs or PELs may be exceeded, a NIOSH/MSHA approved respirator with organic vapor/dust-mist-fume filters represents the minimum level of respiratory protection. To insure proper respirator selection and use, refer to the requirements of 29 CFR 1910.134 and the latest addition of ANSI Z 88.2.

Ventilation**Local Exhaust**

Recommended

Special

None

Mechanical (General)

Recommended

Other

None

Protective Gloves

Rubber or solvent impermeable substitute

Eye Protection

yes

Other Protective Clothing Or Equipment

Eye bath and safety shower.

Work/Hygienic Practices

Wear disposable protective clothing to facilitate recovery of any materials spilled. Use adequate ventilation.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

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MATERIAL SAFETY DATA SHEET

Identity

Mother-of-Pearl OG 803

MSDS # 303

Trade Name and Synonyms

GBC7887

Chemical Family

Mixed resins, solvents and organo-metallic compounds

SECTION I

Manufacturer's Name

Cookson Matthey Ceramics, Inc.

Address

498 Acorn Lane
Dowington, PA 19335

Emergency Telephone Number

(610) 648-8185

Telephone Number

(610) 873-3200

Date Prepared Revised

September 1987 May 1998

Original Prepared By

Wendy Oster

Disclaimer: Employers should use this information only as a supplement to other information gathered by them, and should make independent judgments of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

SECTION II HAZARDOUS INGREDIENTS

Hazardous Components

| | OSHA PEL | ACGIH TLV | CAS # | % |
|--------------------|---------------|---------------|-----------|-------|
| Cyclohexanol | 50 ppm (skin) | 50 ppm (skin) | 108-93-0 | 30-35 |
| Cyclohexanone | 50 ppm | 25 ppm | 108-94-1 | 5-10 |
| *o-Dichlorobenzene | 50 ppm (C) | 25 ppm | 95-50-1 | 5-10 |
| Stoddard Solvent | 500 ppm | 100 ppm | 8052-41-3 | 5-10 |

Other Information

(C) Ceiling Limit Value

*Withheld as a trade secret.

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)

Not applicable

Melting Point, (DEG°F)

Not applicable

Specific Gravity (Water=1):

Greater than water

Appearance And Odor

Dark blue liquid, solvent odor

Percent Volatile by Volume (%)

Not less than 50%

Vapor Pressure, (MM HG.)

Not applicable

Vapor Density (AIR=1)

Heavier than air

Water Solubility, %

Insoluble

Freezing Point

Not applicable

Evaporation Rate (Butyl Acetate=1)

Slower than Butyl Acetate

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

103°F (Setaflash closed cup)

Flammable Limits

LEL Not applicable UEL Not applicable

Extinguishing Media

Carbon Dioxide, Dry Chemical or Chemical Foam. Water may be ineffective, but may be used to cool exposed container.

Special Fire Fighting Procedures

Fire Fighters should wear NIOSH/MSHA approved pressure demand self-contained breathing apparatus.

Unusual Fire And Explosion Hazards

Toxic fumes may be evolved in a fire.

SECTION V
REACTIVITY DATA

Stability **Unstable:** **Stable: X**

Conditions To Avoid

Avoid heating substance where it may be inhaled, and avoid open flame, oxidizers and sources of ignition. Solvent vapors are heavier than air and can accumulate, travel to sources of ignition and flash back.

Incompatibility (Materials To Avoid)

Oxidizers such as chlorates, perchlorates, permanganates, and nitrates. If the preparation comes into contact with ammonia, explosive gold compounds may be formed. Ammoniacal gold solutions should never be stored.

Hazardous Decomposition or Byproducts

Carbon dioxide, carbon monoxide, hydrochloric acid, oxides of sulfur and carbonaceous fumes.

Hazardous Polymerization **May Occur:** **Will Not Occur: X**

SECTION VI
HEALTH HAZARD DATA

| | | | | |
|------------------------|----------------|------------------------|------------------|----------------------|
| Routes Of Entry | Eyes No | Inhalation? Yes | Skin? Yes | Ingestion? No |
|------------------------|----------------|------------------------|------------------|----------------------|

Health Hazards (Acute and Chronic)

Short-term liquid or vapor contact may result in slight eye irritation. Prolonged and repeated contact may be more irritating. Prolonged and repeated liquid contact can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Avoid breathing vapor or spray. Solvents can act as Central Nervous System depressants, exhibiting narcotic and anesthetic effects. Overexposure to some of these components may cause headaches, nausea, vomiting, drowsiness, diarrhea, liver, and kidney damage.

Carcinogenicity

NTP? yes

IARC Monographs? yes

OSHA Regulated? yes

Signs And Symptoms of Exposure

See Health Hazards

Medical Conditions Generally Aggravated by Exposure

See Health Hazards

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes, and contact physician immediately.

Skin contact: Wash with soap and water. Remove contaminated clothing and shoes. Wash or clean before reuse.

Inhalation: Remove from exposure to fresh air. Give artificial respiration if not breathing.

If breathing is difficult, give oxygen. Contact a physician immediately.

Ingestion: Give milk or water. Do not give anything to an unconscious person. Induce vomiting. Contact a physician immediately.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Promptly absorb spill. Conserve and accumulate material and all mops, wipes, sand or vermiculite used to clean up a spill. Remove source of ignition. Cover drains to prevent entry into waterways.

Waste Disposal Method

Return accumulated residues, to refinery for metals recovery. Follow local, state and federal regulations for packaging, labeling, manifesting, transportation and disposal. Do not contaminate any lakes, streams, ponds, or underground water supplies.

Precautions To Be Taken In Handling And Storing

Keep away from heat, open flame, and sources of ignition. Store as flammable liquid. Store in a cool dry place. See Reactivity Section.

Other Precautions

Follow good industrial hygiene and housekeeping practices. Wash hands before eating, drinking, smoking, or applying cosmetics, and at the end of the work shift. Avoid contact with eyes, skin, or clothing.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If there is a possibility that the TLVs or PELs may be exceeded, a NIOSH/MSHA approved respirator with organic vapor/dust-mist-fume filters represents the minimum level of respiratory protection. To insure proper respirator selection and use, refer to the requirements of 29 CFR 1910.134 and the latest addition of ANSI Z 88.2.

Ventilation**Local Exhaust**

Fume hood at point of generation with sufficient exhaust.

Special

None

Mechanical (General)**Other**

None

With sufficient ventilation to remove material from breathing zone.

Eye Protection

Yes, chemical safety goggles.

Protective Gloves

Solvent impermeable gloves

Other Protective Clothing Or Equipment

Eye bath and safety shower.

Work/Hygienic Practices

Wear disposable protective clothing to facilitate recovery of any materials spilled. Use adequate ventilation.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."



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MATERIAL SAFETY DATA SHEET

Identity
Essence OA 901

MSDS # 304

SECTION I

Manufacturer's Name
Cookson Matthey Ceramics, Inc.
Address
1397 King Road
West Chester, PA 19380

Emergency Telephone Number
(602) 648-8185
Telephone Number
(610) 648-8100
Date Prepared **Revised**
September 1987 May 1995
Prepared By
Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

Hazardous Components

Camphor
Cyclohexanone
*o-Dichlorobenzene
Stoddard Solvent

OSHA PEL

2 ppm
50 ppm
50 ppm (C)
500 ppm

ACGIH TLV

2 ppm
25 ppm
25 ppm
100 ppm

CAS #

76-22-2
108-94-1
95-50-1
8052-41-3

%

15-20
20-25
25-30
20-25

Other Information

none

(C) Ceiling Limit Value

* Withheld as a trade secret.

SECTION III PHYSICAL DATA

Boiling Point, (DEG° F)

n/a

Vapor Pressure, (MM HG.)

n/a

Melting Point, (DEG°F)

n/a

Vapor Density (AIR=1)

> 1

Specific Gravity (Water=1):

> 1

Water Solubility, %

Immiscible

Appearance And Odor

Clear yellow liquid, solvent odor

Freezing Point

n/a

pH

n/a

Evaporation Rate (Butyl Acetate=1)

n/a

Flash Point (Method Used)

108°F (Setaflash closed cup)

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

Water spray, CO₂, dry chemical or chemical foam. DO NOT USE WATER JET.

Special Fire Fighting Procedures

Fire Fighters should wear NIOSH/MSHA approved pressure demand self-contained breathing apparatus.

Unusual Fire And Explosion Hazards

Toxic fumes may be evolved in a fire.

SECTION V REACTIVITY DATA

Stability

Unstable:

Stable: X

Conditions To Avoid

Avoid heating substance where it may be inhaled, and avoid open flames, oxidizers and sources of ignition.

Incompatibility (Materials To Avoid)

Oxidizers such as chlorates, perchlorates, permanganates, and nitrates.

Hazardous Decomposition or Byproducts

CO, CO₂, HC1, oxides of sulfur, and carbonaceous fumes.

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry

Inhalation? yes

Skin? yes

Ingestion? yes

Health Hazards (Acute and Chronic)

Short-term liquid or vapor contact may result in slight eye irritation. Prolonged and repeated contact may be more irritation. Prolonged and repeated liquid contact can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Avoid breathing vapor or spray. Solvents can act as Central Nervous System depressants, exhibiting narcotic and anesthetic effects. Overexposure to some of these components may cause headaches, nausea, vomiting, drowsiness, diarrhea, liver, and kidney damage.

Carcinogenicity

NTP? yes

IARC Monographs? yes

OSHA Regulated? yes

Signs And Symptoms of Exposure

See Health Hazards

Medical Conditions Generally Aggravated by Exposure

See Health Hazards

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes, and contact physician immediately.

Skin contact: Wash with soap and water. Remove contaminated clothing and shoes. Wash or clean before reuse.

Inhalation: Remove from exposure to fresh air. Give artificial respiration if not breathing.

If breathing is difficult, give oxygen. Contact a physician immediately.

Ingestion: Give milk or water. Do not give anything to an unconscious person. Induce vomiting. Contact a physician immediately.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Promptly absorb spill. Remove sources of ignition. Cover drains to prevent entry into waterways.

Waste Disposal Method

Store material in appropriate containers. Follow local, state, and federal regulations for packaging, labeling, manifesting, transportation, and disposal.

Precautions To Be Taken In Handling And Storing

Keep away from heat, open flame, and sources of ignition. Store as flammable liquid.

Other Precautions

Follow good industrial hygiene and housekeeping practices. Do not eat drink, or smoke while working with this material. Wash hands before eating, drinking, smoking, or applying cosmetics, and at the end of the work shift. Avoid contact with eyes, skin, or clothing. Do not ingest. Avoid prolonged breathing of dust. Keep container closed when not in use.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If there is a possibility that the TLVs or PELs may be exceeded, a NIOSH/MSHA approved respirator with organic vapor/dust-mist-fume filters represents the minimum level of respiratory protection. To insure proper respirator selection and use, refer to the requirements of 29 CFR 1910.134 and the latest addition of ANSI Z 88.2.

Ventilation**Local Exhaust**

Recommended

Special

None

Mechanical (General)

Recommended

Other

None

Protective Gloves

Solvent impermeable gloves

Eye Protection

yes

Other Protective Clothing Or Equipment

Eye bath and safety shower.

Work/Hygienic Practices

Wear disposable protective clothing to facilitate recovery of any materials spilled. Use adequate ventilation.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236.

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity

Mother-of-Pearl OG 804

MSDS # 305

SECTION I

Manufacturer's Name

Cookson Matthey Ceramics, Inc.

Address

1397 King Road
West Chester, PA 19380

Emergency Telephone Number

(601) 648-8185

Telephone Number

(601) 648-8100

Date Prepared Revised

September 1987

May 1995

Prepared By

Scott Mattison

SECTION II

HAZARDOUS INGREDIENTS

Hazardous Components

Cyclohexanol
Cyclohexanone
*o-Dichlorobenzene
Stoddard Solvent
Propane-Isobutane Mixture

OSHA PEL

50 ppm (skin)
50 ppm
50 ppm (C)
500 ppm
1000 ppm

ACGIH TLV

50 ppm (skin)
25 ppm
25 ppm
100 ppm
NE

CAS

108-93-0
108-94-1
95-50-1
8052-41-3
68476-86-8

%

30-35
5-10
5-10
5-10
0-30

Other Information

*Denotes SARA Section 313 Title III Toxic Chemicals and 40 CFR 372.45.

+The specific chemical identity is withheld as a trade secret.

xDenotes that these compounds are considered to be suspect or confirmed carcinogens by NTP, IARC, NIOSH, or OSHA and may have reproductive effects.

(C) Ceiling Limit Value

SECTION III

PHYSICAL DATA

Boiling Point, (DEG°F)

n/a

Vapor Pressure, (MM HG.)

n/a

Melting Point, (DEG°F)

n/a

Vapor Density (AIR=1)

> than 1

Specific Gravity (Water=1):

> than 1

Water Solubility, %

Insoluble

Appearance And Odor

Dark blue liquid, solvent odor.

Freezing Point

n/a

pH

n/a

Evaporation Rate (Butyl Acetate=1)

n/a

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

112°F (Setaflash Closed Cup)

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

Waterspray, CO₂, dry chemical or chemical foam. DO NOT USE WATER JET.

Special Fire Fighting Procedures

Fire Fighters should wear NIOSH/MSHA approved pressure demand self contained breathing apparatus.

Unusual Fire And Explosion Hazards

Toxic fumes may be evolved in a fire.

SECTION V

REACTIVITY DATA

Stability

Unstable:

Stable: X

Conditions To Avoid

Avoid heating substance where it may be inhaled, and avoid open flame, oxidizers and sources of ignition.

Incompatibility (Materials To Avoid)

Oxidizers such as chlorates, perchlorates, permanganates, and nitrates.

Hazardous Decomposition or Byproducts

CO, CO₂, HC1, phosgene, C12, oxides of sulfur. At high temperatures, oxides of nitrogen, chromium and bismuth, as well as elemental gold and rhodium.

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry **Inhalation?** yes **Skin?** yes **Ingestion?** yes

Health Hazards (Acute and Chronic)

Short-term liquid or vapor contact may result in slight eye irritation. Prolonged and repeated contact may be more irritating. Prolonged and repeated liquid contact can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Avoid breathing vapor or spray. Solvents can act as Central Nervous System depressants, exhibiting narcotic and anesthetic effects. Overexposure to some of these components may cause headaches, nausea, vomiting, drowsiness, diarrhea, liver, and kidney damage.

Carcinogenicity

NTP? yes

IARC Monographs? yes

OSHA Regulated? yes

Signs And Symptoms of Exposure

See Health Hazards

Medical Conditions Generally Aggravated by Exposure

See Health Hazards

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes, and contact a physician immediately.

Skin contact: Wash with soap and water. Remove contaminated clothing and shoes. Wash or clean before reuse.

Inhalation: Remove from exposure to fresh air. Give artificial respiration if not breathing.

If breathing is difficult, give oxygen. Contact a physician immediately.

Ingestion: Give milk or water. Do not give anything to an unconscious person. Induce vomiting. Contact a physician immediately.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Promptly absorb spill. Conserve and accumulate material and all mops, wipes, sand or vermiculite used to clean up a spill. Remove source of ignition. Cover drains to prevent entry into waterways.

Waste Disposal Method

Return accumulated residues, to refinery for metals recovery. Follow local, state and federal regulations for packaging, labeling, manifesting, transportation and disposal. Do not contaminate any lakes, streams, ponds, or underground water supplies.

Precautions To Be Taken In Handling And Storing

Keep away from heat, open flame, and sources of ignition. Store as flammable liquid. Store in a cool dry place. See Reactivity Section.

Other Precautions

Follow good industrial hygiene and housekeeping practices. Wash hands before eating, drinking, smoking, or applying cosmetics, and at the end of the work shift. Avoid contact with eyes, skin, or clothing.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If there is a possibility that the TLVs or PELs may be exceeded, a NIOSH/MSHA approved respirator with organic vapor/dust-mist-fume filters represents the minimum level of respiratory protection. To insure proper respirator selection and use, refer to the requirements of 29 CFR 1910.134 and the latest addition of ANSI Z 88.2.

Ventilation

Local Exhaust

Fume hood at point of generation with sufficient exhaust.

Special

None

Mechanical (General)

Other

None

With sufficient ventilation to remove material from breathing zone.

Eye Protection

Yes, chemical safety goggles.

Protective Gloves

Solvent impermeable gloves

Other Protective Clothing Or Equipment

Eye bath and safety shower.

Work/Hygienic Practices

Wear disposable protective clothing to facilitate recovery of any materials spilled. Use adequate ventilation.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

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MATERIAL SAFETY DATA SHEET

Identity

Premium Gold OG 805

MSDS # 306

Address

1397 King Road
West Chester, PA 19380

Emergency Telephone Number

(610) 648-8185

Telephone Number

(610) 648-8100

Date Prepared Revised

September 1987

May 1995

Prepared By

Scott Mattison

SECTION I

Manufacturer's Name

Cookson Matthey Ceramics, Inc.

Hazardous Components

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|---|-----------------------|-----------------------|------------|-------|
| +*Aromatic Hydrocarbon TRNS 80100419-5011p | 0.2ppm | 0.2 ppm | | 1-5 |
| Camphor | 2 ppm | 2 ppm | 76-22-2 | 5-10 |
| *xOrgano Chromium Compound (as Cr) | 0.5 mg/m ³ | 0.5 mg/m ³ | 20195-23-7 | <1 |
| Cyclohexanol | 50 ppm (skin) | 50 ppm (skin) | 108-93-0 | 10-15 |
| *Monochlorobenzene | 10 ppm | 75 ppm | 108-90-7 | 1-5 |
| o-Dichlorobenzene | 25 ppm | C 50 ppm | 95-50-1 | 1-5 |
| Turpentine | 100 ppm | 100 ppm | 8006-64-2 | 1-10 |

Other Information

* Denotes SARA Section 313 Title III Toxic Chemicals and 40 CFR 372.45.

+ The specific chemical identity is withheld as a trade secret.

— x Denotes that these compounds are considered to be suspect or confirmed carcinogens by NTP, IARC, NIOSH, or OSHA and may have reproductive effects.

SECTION II HAZARDOUS INGREDIENTS

| | |
|-----------------------------|--|
| Boiling Point, (DEG°F) | n/a |
| Melting Point, (DEG°F) | n/a |
| Specific Gravity (Water=1): | n/a |
| Appearance And Odor | Purple liquid with characteristic odor |
| pH | n/a |

| | |
|------------------------------------|------------|
| Vapor Pressure, (MM HG.) | n/a |
| Vapor Density (AIR=1) | n/a |
| Water Solubility, % | Immiscible |
| Freezing Point | n/a |
| Evaporation Rate (Butyl Acetate=1) | n/a |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | |
|------------------------------|----------------------|
| Flash Point (Method Used) | Flammable Limits |
| 110°F (Setaflash Closed Cup) | LEL n/a UEL n/a |

Extinguishing Media

Waterspray, CO₂, dry chemical or chemical foam. DO NOT USE WATER JET.

Special Fire Fighting Procedures

Fire Fighters should wear NIOSH/MSHA approved pressure demand self contained breathing apparatus.

Unusual Fire And Explosion Hazards

Toxic fumes may be evolved in a fire.

SECTION V REACTIVITY DATA

Stability

Unstable:

Stable: X

Conditions To Avoid

Avoid heating substance where it may be inhaled, avoid open flame, oxidizers and sources of ignition.

Incompatibility (Materials To Avoid)

Oxidizers such as chlorates, perchlorates, permanganates, and nitrates.

Hazardous Decomposition or Byproducts

CO, CO₂, HCl, oxides of sulfur, and carbonaceous fumes.

Hazardous Polymerization

May Occur:

Will Not Occur: X

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry

Inhalation? yes

Skin? yes

Ingestion? yes

Health Hazards Effects of Overexposure (Acute and Chronic)

Short-term liquid or vapor contact may result in slight eye irritation. Prolonged and repeated contact may be more irritating. Prolonged and repeated liquid contact can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Avoid breathing vapor or spray. Solvents can act as Central Nervous System depressants, exhibiting narcotic and anesthetic effects. Overexposure to some of these components may cause headaches, nausea, vomiting, drowsiness, diarrhea, liver, and kidney damage. *Chromium compounds are listed by NTP as suspect carcinogens. Chromium compounds may cause sensitization by skin contact.

Signs And Symptoms of Exposure

See Health Hazards

Medical Conditions Generally Aggravated by Exposure

See Health Hazards

Emergency And First Aid Procedures

Skin: In case of contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing and shoes.
Wash or clean before reuse.

Eye: Rinse for 15 minutes and contact a physician immediately.

Inhalation: Remove from exposure to fresh air. Give artificial respiration if not breathing. If breathing is difficult, give oxygen.
Contact a physician immediately.

Ingestion: Give milk or water. Do not give anything to an unconscious person. Induce vomiting. Get medical attention.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Prevent wastage. Promptly absorb spill. Conserve and accumulate material and all mops, wipes, sand or vermiculite used to clean up a spill.

Remove sources of ignition. Cover drains to prevent entry into waterways. Wear personal protective equipment (clothing and gloves) when handling spilled materials. (See Section on Special Protection Information, below.)

Waste Disposal Method

Follow local, state and federal regulations for packaging, labeling, manifesting, transportation and disposal. Do not contaminate any lakes, streams, ponds or underground water supplies.

Precautions To Be Taken In Handling And Storing

Store in sealed container. If flammable, keep away from sources of ignition and flame.

Other Precautions

Follow good industrial hygiene and housekeeping practices. Wash hands before eating, drinking, smoking or apply cosmetics, and at the end of the work shift. Avoid contact with eyes, skin, or clothing.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If there is a possibility that the TLVs or PELs may be exceeded, a NIOSH/MSHA approved respirator with organic vapor/dust-mist-fume filters represents the minimum level of respiratory protection. To insure proper respirator selection and use, refer to the requirements of 29 CFR 1910.134 and the latest addition of ANSI Z 88.2.

Ventilation

Fume hood at point of generation with sufficient
sufficient exhaust to remove material from breathing zone.

Special

None

Mechanical (General)

With sufficient ventilation to remove material
from breathing zone.

Other

None

Protective Gloves

Solvent impermeable gloves

Eye Protection

Yes. Chemical safety goggles

Other Protective Clothing Or Equipment

Eye bath and safety shower.

Work/Hygienic Practices

Wear disposable protective clothing to facilitate recovery of any materials spilled. Use adequate ventilation.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65
birth defects or other reproductive harm.

WARNING: This product contains chemicals known to the State of California to cause cancer,

CAUTION
CONFORMS TO
ASTM D-4236

"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

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MATERIAL SAFETY DATA SHEET

Identity

MSDS # 401

AS 952; AS 953; AS 954; AS 957; AS 959; AS 960; AS 964; AS 974; AS 975; AS 976; AS 977; AS 978; AY 100, 300 & 400 Series;
CW 101 & 102; EN 101 to EN 108; EN 110 to EN 112; EN 115 to EN 116; GC 100, 200 & 400 Series; GE 200 Series;
GS 100, 200, 600 Series; NB 300 Series; KN 101 to KN 108; KN 110 to 112; KR 100 & KR 300 Series; NT Series; OA 902;
OC 100, 200, 300 & 700 Series; OS 400 & OS 500 Series; PL 100 and 200 Series; SG 800 Series; SP 401; SP 402; SP 407;
SP 408; SP 508; SP 509; SY 545; SY 549; TS 500 Series; UM 900 Series; WG 800 Series; 65123 Tulip Paint Extender

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

| | |
|----------|--------------------------------------|
| Health 0 | Reactivity 0 |
| Fire 1 | Protective Equip. G (if spraying) |

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared Revised
August 1987 March 1, 1999

Prepared By
Frank Peters

SECTION II

HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|----------------------|----------|-----------|-------|---|
| None | | | | |

Other Information

None

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)

212°F

Melting Point, (DEG°F)

n/a

Specific Gravity (Water=1):

1.0 - 1.3

Appearance And Odor

Opaque colored latex paint

pH

6.5 - 9.0

Vapor Pressure, (MM HG.)

n/a

Vapor Density (AIR=1)

Less than 1 water

Water Solubility, %

Insoluble

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

Less than 1 water

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

Use appropriate techniques and media for surrounding fire.

Special Fire Fighting Procedures

None.

Unusual Fire And Explosion Hazards

Material can spatter above 212°F.

Polymer film can burn.

SECTION V REACTIVITY DATA

Stability

Conditions To Avoid

n/a

Unstable:

Stable: X

Incompatibility (Materials To Avoid)

n/a

Hazardous Decomposition or Byproducts

n/a

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

| | | | |
|---|-----------------------|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? no | Skin? no | Ingestion? no |
| Health Hazards (Acute and Chronic) | | | |
| None. Nontoxic. | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| n/a | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasive, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: Flush with water at least 15 minutes. Skin contact: Wash with soap and water. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Put paper towels in trash and rinse out sponge. Follow Federal, State and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Keep container sealed.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If spraying, do not inhale mist. Use respirator that is NIOSH approved for sprays and mists.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Recommended when spraying.

Protective Gloves

no

Other Protective Clothing Or Equipment

None needed.

Work/Hygienic Practices

Good hygiene practices should be followed.

Special

Use respirator when spraying

Other

none

Eye Protection

Safety glasses with side shields.

Do not wear contact lenses.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA Proposition 65 n/a



Products bearing the Nontoxic Product Seal are certified in a program to toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c).

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity
AS 951 Antiquing Solvent; AS 958 Stain Media; NS Series

MSDS # 402

SECTION I

Manufacturer's Name
Duncan Enterprises

Address
5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes
Health 2 Reactivity 0
Fire 2 Protective Equip. G
(if spraying)

Emergency Telephone Number
(559) 291-4444
Telephone Number
(559) 291-4444
Date Prepared Revised
September 1987 March 1, 1999
Prepared By
Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|-----------------------------|-----------------------|-----------------------|--------------|----------|
| Mineral Spirits | 100 mg/m ³ | 100 mg/m ³ | 64741-41-9 | |

SECTION III PHYSICAL DATA

| | |
|--|--|
| Boiling Point, (DEG°F) 310 - 405°F | Vapor Pressure, (MM HG.) 2.9 |
| Melting Point, (DEG°F) n/a | Vapor Density (AIR=1) 4.9 |
| Specific Gravity (Water=1): .776 | Water Solubility, % 0.1 (Est.) |
| Appearance And Odor Colored translucent liquid with mineral spirit odor | Freezing Point n/a |
| pH n/a | Evaporation Rate (Butyl Acetate=1) 0.19 (Est.) |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | |
|--|-------------------------------------|
| Flash Point (Method Used) 104 | Flammable Limits |
| Extinguishing Media Dry chemical, CO ₂ or foam | LEL n/a UEL 0.7 - 0.6 |
| Special Fire Fighting Procedures Use self-contained breathing apparatus. | |
| Unusual Fire And Explosion Hazards The vapors are heavier than air and may travel considerable distances. Use away from all sources of ignition. | |

SECTION V REACTIVITY DATA

| | | |
|--|-------------------|--------------------------|
| Stability | Unstable: | Stable: X |
| Conditions To Avoid n/a | | |
| Incompatibility (Materials To Avoid) Acids or bases, oxidizing agents, selected amines. | | |
| Hazardous Decomposition or Byproducts Thermal decomposition may yield CO ₂ and/or carbon monoxide | | |
| Hazardous Polymerization | May Occur: | Will Not Occur: X |
| Conditions To Avoid n/a | | |

SECTION VI
HEALTH HAZARD DATA

| | | | |
|--|------------------------|---------------------|-----------------------|
| Routes Of Entry | Inhalation? yes | Skin? no | Ingestion? yes |
| Health Hazards (Acute and Chronic) Reports have associated repeated and prolonged overexposure to solvent vapors with brain and nerve system damage. | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure Irritation to the nose and throat when breathing high concentrations ingesting may cause irritation to digestive tract. Signs of drowsiness, dizziness and fatigue may mean overexposure. | | | |
| Medical Conditions Generally Aggravated by Exposure Pre-existing skins disorders may be aggravated. Those with respiratory problems may experience breathing problems. | | | |
| Emergency And First Aid Procedures | | | |
| Ingestion: Do not induce vomiting. Eye contact: Flush with water at least 15 minutes. Skin contact: Wash with soap and water. Inhalation: Remove to fresh air. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

| | |
|--|---|
| Steps To Be Taken In Case Material Is Released Or Spilled | Eliminate all open flames in vicinity of spill or released vapor. Clean all spills immediately. |
| Waste Disposal Method | |
| Place contaminated material in sealed containers. Follow Federal, State, and Local regulations for disposal. | |
| Precautions To Be Taken In Handling And Storing | |
| Eliminate all open flames in vicinity of spill or open containers. Keep out of reach of children. | |
| Other Precautions | |
| None | |

SECTION VIII
CONTROL MEASURES

| | |
|--|--|
| Respiratory Protection (Specify Type) | Use a NIOSH approved vapor respirator if spraying or if vapors exceed TLV. |
| Ventilation | |
| Local Exhaust | Special |
| Recommended | Use respirator when spraying |
| Mechanical (General) | |
| Recommended when spraying | Other |
| Protective Gloves | |
| Yes Rubber or Neoprene | Eye Protection |
| Other Protective Clothing Or Equipment | |
| None. | yes |
| Work/Hygienic Practices | |
| Use good hygiene. Wash with soap and water before eating or smoking. | |

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

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MATERIAL SAFETY DATA SHEET

Identity
Thickener & Texturizer AS 955

MSDS # 403

SECTION I

| | | | |
|----------------------------|--|-----------------------------------|----------------|
| Manufacturer's Name | Duncan Enterprises | Emergency Telephone Number | (559) 291-4444 |
| Address | 5673 E. Shields Ave. Fresno, CA 93727 | Telephone Number | (559) 291-4444 |
| HMIS Codes | Health 0 Reactivity 0 Fire 1 Protective Equip. G (if spraying) | Date Prepared | Revised |
| | | August 1987 | March 1, 1999 |
| | | Prepared By | |
| | | Scott Mattison | |

SECTION II HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|----------------------|----------|-----------|-------|---|
| none | | | | |

Other Information
none

SECTION III PHYSICAL DATA

| | |
|------------------------------------|---|
| Boiling Point, (DEG°F) | Vapor Pressure, (MM HG.) |
| 212°F | n/a |
| Melting Point, (DEG°F) | Vapor Density (AIR=1) |
| n/a | n/a |
| Specific Gravity (Water=1): | Water Solubility, % |
| 1.9 | < 5% |
| Appearance And Odor | Freezing Point |
| White powder | n/a |
| pH | Evaporation Rate (Butyl Acetate=1) |
| n/a | n/a |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | |
|----------------------------------|-------------------------|
| Flash Point (Method Used) | Flammable Limits |
| n/a | LEL n/a UEL n/a |

Extinguishing Media

The product will burn & support combustion when ignited. When the product burns, water, carbon dioxide, carbon monoxide, acetic acid & smoke are produced. Self-contained breathing apparatus should be used when fighting fires, especially in enclosed spaces such as warehouses. Extinguish fires with a water spray or multi-purpose dry chemical. Pyrolyproducts include acetic acid, carbon monoxide, carbon oxide, and smoke..

Special Fire Fighting Procedures

See Extinguishing Media.

Unusual Fire And Explosion Hazards

None.

SECTION V REACTIVITY DATA

| | | |
|------------------|-----------|-----------|
| Stability | Unstable: | Stable: X |
|------------------|-----------|-----------|

Conditions To Avoid
n/a

Incompatibility (Materials To Avoid)

n/a

Hazardous Decomposition or Byproducts

n/a

| | | |
|---------------------------------|------------|-------------------|
| Hazardous Polymerization | May Occur: | Will Not Occur: X |
|---------------------------------|------------|-------------------|

Conditions To Avoid
n/a

SECTION VI
HEALTH HAZARD DATA

| | | | |
|--|-----------------------|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? no | Skin? no | Ingestion? no |
| Health Hazards (Acute and Chronic) | | | |
| None. Nontoxic | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| n/a | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasives, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: Flush with water at least 15 minutes. | | | |
| Skin contact: Wash with soap and water. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Put paper towels in trash and rinse out sponge. Follow Federal, State and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Keep container sealed.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If spraying, do not inhale mist. Use respirator that is NIOSH approved for sprays and mists.

Ventilation

Local Exhaust

Recommended

Mechanical (General)

Recommended when spraying

Protective Gloves

no

Special

Use respirator when spraying

Other

none

Eye Protection

Yes.

Other Protective Clothing Or Equipment

None needed.

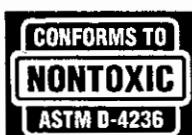
Work/Hygienic Practices

Good hygiene practices should be followed.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA Proposition 65

n/a



"Products bearing the Nontoxic Product Seal are certified in a program to toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c)."

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity SY 556 Dipping Glaze Thickener **MSDS #** 404

SECTION I

Manufacturer's Name Duncan Enterprises
Address 5673 E. Shields Ave.
Fresno, CA 93727
HMIS Codes
Health 0 Reactivity 0
Fire 1 Protective Equip. G
(if spraying)

Emergency Telephone Number
(559) 291-4444
Telephone Number
(209) 291-4444
Date Prepared September 1997 **Revised** March 1, 1999
Prepared By Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|-----------------------------|-----------------|------------------|--------------|----------|
| None | | | | |

Other Information
None

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)
212°F
Melting Point, (DEG°F)
n/a
Specific Gravity (Water=1):
1.0 - 1.3
Appearance And Odor
Opaque colored latex paint
pH
6.5 - 9.0

Vapor Pressure, (MM HG.)
n/a
Vapor Density (AIR=1)
Less than 1 water
Water Solubility, %
Insoluble
Freezing Point
n/a
Evaporation Rate (Butyl Acetate=1)
Less than 1 water

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)
n/a
Extinguishing Media
Use appropriate techniques and media for surrounding fire.
Special Fire Fighting Procedures
None.
Unusual Fire And Explosion Hazards
Material can spatter above 212°F.
Polymer film can burn.

Flammable Limits
LEL n/a UEL n/a

SECTION V REACTIVITY DATA

Stability
Conditions To Avoid
n/a
Incompatibility (Materials To Avoid)
n/a
Hazardous Decomposition or Byproducts
n/a
Hazardous Polymerization
Conditions To Avoid
n/a

Unstable: **Stable:** X

May Occur: **Will Not Occur:** X

SECTION VI
HEALTH HAZARD DATA

| | | | |
|---|-----------------------|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? no | Skin? no | Ingestion? no |
| Health Hazards (Acute and Chronic) | | | |
| None. Nontoxic. | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| n/a | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasives, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: Flush with water at least 15 minutes. Skin contact: Wash with soap and water. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Put paper towels in trash and rinse out sponge. Follow Federal, State and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Keep container sealed.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If spraying, do not inhale mist. Use respirator that is NIOSH approved for sprays and mists.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Recommended when spraying.

Protective Gloves

no

Other Protective Clothing Or Equipment

None needed.

Work/Hygienic Practices

Good hygiene practices should be followed.

Special

Use respirator when spraying

Other

none

Eye Protection

Safety glasses with side shields.

Do not wear contact lenses.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA Proposition 65 n/a

"Products bearing the Nontoxic Product Seal are certified in a program to toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c)."

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MATERIAL SAFETY DATA SHEET

Identity
AW 100 Series Wood Stains

MSDS # 405

SECTION I

Manufacturer's Name
Duncan Enterprises
Address
5673 E. Shields Ave.
Fresno, CA 93727
HMIS Codes
Health 2 Reactivity 0
Fire 2 Protective Equip. G
(if spraying)

Emergency Telephone Number
(559) 291-4444
Telephone Number
(559) 291-4444
Date Prepared Revised
February 2001
Prepared By
Frank Peters

SECTION II HAZARDOUS INGREDIENTS

| | | | | |
|--|--|---|----------------------------|----------|
| Hazardous Components Mineral Spirits | OSHA PEL 100 mg/m ³ | ACGIH TLV 100 mg/m ³ | CAS # 64741-41-9 | % |
|--|--|---|----------------------------|----------|

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)
310 - 405°F
Melting Point, (DEG°F)
n/a
Specific Gravity (Water=1):
1.0 - 1.2
Appearance And Odor
Colored opaque liquid with
mineral spirit odor
pH
7 - 9

Vapor Pressure, (MM HG.)
2.9
Vapor Density (AIR=1)
4.9
Water Solubility, %
100% (Est.)
Freezing Point
n/a
Evaporation Rate (Butyl Acetate=1)
0.19 (Est.)

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)
104
Extinguishing Media
Dry chemical, CO₂ or foam
Special Fire Fighting Procedures
Use self-contained breathing apparatus.
Unusual Fire And Explosion Hazards
The vapors are heavier than air and may travel considerable distances. Use away from all sources of ignition.

Flammable Limits
LEL n/a UEL 0.7 - 0.6

SECTION V REACTIVITY DATA

Stability
Unstable: Stable: X
Conditions To Avoid
n/a
Incompatibility (Materials To Avoid)
Acids or bases, oxidizing agents, selected amines.
Hazardous Decomposition or Byproducts
Thermal decomposition may yield CO₂ and/or carbon monoxide
Hazardous Polymerization
Conditions To Avoid
n/a

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry

Inhalation? yes

Skin? no

Ingestion? yes

Health Hazards (Acute and Chronic)

Reports have associated repeated and prolonged overexposure to solvent vapors with brain and nerve system damage.

Carcinogenicity

NTP? no

IARC Monographs? no

OSHA Regulated? no

Signs And Symptoms of Exposure

Irritation to the nose and throat when breathing high concentrations ingesting may cause irritation to digestive tract. Signs of drowsiness, dizziness and fatigue may mean overexposure.

Medical Conditions Generally Aggravated by Exposure

Pre-existing skin disorders may be aggravated. Those with respiratory problems may experience breathing problems.

Emergency And First Aid Procedures

Ingestion: Do not induce vomiting.

Eye contact: Flush with water at least 15 minutes.

Skin contact: Wash with soap and water.

Inhalation: Remove to fresh air.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Eliminate all open flames in vicinity of spill or released vapor. Clean all spills immediately.

Waste Disposal Method

Place contaminated material in sealed containers. Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Eliminate all open flames in vicinity of spill or open containers. Keep out of reach of children.

Other Precautions

None

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

Use a NIOSH approved vapor respirator if spraying or if vapors exceed TLV.

Ventilation**Local Exhaust**

Recommended

Special

Use respirator when spraying

Other**Mechanical (General)**

Recommended when spraying

Eye Protection

yes

Protective Gloves

Yes Rubber or Neoprene

Other Protective Clothing Or Equipment

None.

Work/Hygienic Practices

Use good hygiene. Wash with soap and water before eating or smoking.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA Proposition 65 n/a

"Products bearing the Nontoxic Product Seal are certified in a program to toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c)."

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MATERIAL SAFETY DATA SHEET

Identity

Aleene's Clean Away 50-15

MSDS # 406

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

Health 0 Reactivity 0
Fire 1 Protective Equip. G
(if spraying)

SECTION I

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared Revised

January 2001

Prepared By
Brad Damotte

Hazardous Components

None

Other Information

None

SECTION II
HAZARDOUS INGREDIENTS

OSHA PEL

ACGIH TLV

CAS #

%

SECTION III
PHYSICAL DATA

Boiling Point, (DEG°F)

212°F

Melting Point, (DEG°F)

n/a

Specific Gravity (Water=1):

1.0 - 1.3

Appearance And Odor

Opaque colored latex paint

pH

6.5 - 9.0

Vapor Pressure, (MM Hg.)

n/a

Vapor Density (AIR=1)

Less than 1 water

Water Solubility, %

Insoluble

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

Less than 1 water

SECTION IV
FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

Use appropriate techniques and media for surrounding fire.

Special Fire Fighting Procedures

None.

Unusual Fire And Explosion Hazards

Material can spatter above 212°F.

Polymer film can burn.

SECTION V
REACTIVITY DATA

Stability

Conditions To Avoid

n/a

Unstable: **Stable: X**

Incompatibility (Materials To Avoid)

n/a

Hazardous Decomposition or Byproducts

n/a

Hazardous Polymerization

Conditions To Avoid

n/a

May Occur: **Will Not Occur: X**

SECTION VI
HEALTH HAZARD DATA

| | | | |
|---|-----------------------|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? no | Skin? no | Ingestion? no |
| Health Hazards (Acute and Chronic) | | | |
| None. Nontoxic. | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| n/a | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasive, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: Flush with water at least 15 minutes. Skin contact: Wash with soap and water. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Put paper towels in trash and rinse out sponge. Follow Federal, State and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Keep container sealed.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If spraying, do not inhale mist. Use respirator that is NIOSH approved for sprays and mists.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Recommended when spraying.

Protective Gloves

no

Other Protective Clothing Or Equipment

None needed.

Work/Hygienic Practices

Good hygiene practices should be followed.

Special

Use respirator when spraying

Other

none

Eye Protection

Safety glasses with side shields.

Do not wear contact lenses.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA Proposition 65 n/a



"Products bearing the Nontoxic Product Seal are certified in a program to toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c)."

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MATERIAL SAFETY DATA SHEET

Identity

Ceramic Sealer: SS 330 Super Gloss

MSDS # 501

Manufacturer's Name
The Sherwin-Williams Company
Address
Diversified Brands
Cleveland, OH 44115

Emergency Telephone Number
(216) 566-2917
Telephone Number
(216) 595-8936
Date Prepared March 1988 **Revised** June 6, 2000
Prepared By
Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

| INGREDIENT | CAS NUMBER | OSHA PEL PPM | ACGHI TLV PPM | STEL | V.P. | % |
|---------------------|------------|-----------------|---------------------|-----------|--------|----|
| Propane | 74-98-6 | 1000 | 2500 | --- | 760.00 | 13 |
| Butane | 106-97-8 | 800 | 800 | --- | 760.00 | 12 |
| Methylene Chloride | 75-09-2 | 25 | 50 | 125 | 420.00 | 15 |
| Toluene | 108-88-3 | 50 | 100 (skin) | 150(skin) | 22.00 | 6 |
| Ethylbenzene | 100-41-4 | 100 | 100 | 125 | 7.10 | 3 |
| Xylene | 1330-20-7 | 100 | 100 | 150 | 5.90 | 15 |
| 2-Butoxyethanol | 111-76-2 | 20 | 20(skin) | ---- | .88 | 4 |
| Methyl Ethyl Ketone | 78-93-3 | 200 | 200 | 300 | 70.00 | 9 |
| n-Butyl Acetate | 123-86-4 | 150 | 150 | 200 | 10.00 | 5 |

SECTION III PHYSICAL DATA

Product Weight

6.71 lb/gal 804 g/l

Boiling Point, (DEG°F)

<0 - 340°F <-18 - 172°C

Melting Point, (DEG°F)

n/a

Vapor Pressure, (MM HG.)

n/a

HMIS

2* 4 0

Volatile Organic Compounds (VOC Theoretical)

Volatile Weight 68.54% Less Federally Exempt Solvents

Specific Gravity (Water=1):

0.81

Evaporation Rate (Butyl Acetate=1)

Faster than Ether

Vapor Density (AIR=1)

Heavier than air

Water Solubility, %

n/a

Percent Volatile by Volume (%)

89

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

11 °F TCC

Extinguishing Media

CO₂, Dry Chemical or Foam

Unusual Fire And Explosion Hazards

Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

Special Fire Fighting Procedures

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION V
HEALTH HAZARD DATA

ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

ACUTE Health Hazards**EFFECTS OF OVEREXPOSURE**

Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death. Overexposure to Methylene Chloride can raise the level of carbon monoxide in the blood.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Cardiovascular problems may be aggravated by overexposure to Methylene Chloride.

EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED: Never give anything by mouth to an unconscious person. Give conscious patient several glasses of water. If vomiting is not spontaneous, induce vomiting by having the patient gently touch the back of his throat with a finger. Keep airway clear. Seek medical attention.

CHRONIC Health Hazards

Methylene Chloride is listed by IARC, NTP, and OSHA. Laboratory animals exposed to high levels of Methylene Chloride in lifetime studies have developed cancer. There is no evidence to date that Methylene Chloride causes cancer in humans.

Methyl Ethyl Ketone may increase the nervous system effects of other solvents.

Prolonged overexposure to solvent ingredients in Section II may cause adverse effects to the liver, urinary, blood forming, cardiovascular, nervous and reproductive systems.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

SECTION VI
REACTIVITY DATA

Stability

Unstable:

Stable: X

Conditions To Avoid

None known.

Incompatibility

None known.

Hazardous Decomposition or Byproducts

By fire: Carbon Dioxide, Carbon Monoxide, Hydrogen Chloride.

Hazardous Polymerization

May Occur:

Will Not Occur: X

SECTION VII
SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate and remove with inert absorbent.

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Do not incinerate. Depressurize container.

Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

SECTION VIII
PROTECTIVE INFORMATION

PRECAUTIONS TO BE TAKEN IN USE

Before initial use, consult OSHA's Standard for Occupational Exposure to Methylene Chloride (29 CFR 1910.1052). Use only with adequate ventilation.

Avoid breathing vapor and spray mist. Avoid contact with skin and eyes. Wash hands after using.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section II is maintained below applicable exposure limits.

Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

An air supplied respirator must be worn, unless air monitoring demonstrates vapor/mist concentrations are below permissible limits. Follow respirator manufacturer's directions for respirator use.

PROTECTIVE GLOVES

For intermittent exposure, wear VITON or nitrile gloves recommended by glove manufacturer for protection against materials in Section II. For immersion, wear PVA gloves recommended by glove manufacturer.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

SECTION IX
PRECAUTIONS

DOL STORAGE CATEGORY

1A

PRECAUTONS TO BE TAKEN IN HANDLING AND STORING

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively. During use and until all vapors are gone: Keep area ventilated – Do not smoke – Extinguish all flames, pilot lights, and heaters – Turn off stoves, electric tools and appliances, and any other sources of ignition. Consult NFPA Code. Use approved Bonding and Grounding procedures. Contents under pressure. Do not puncture, incinerate, or expose to temperature above 120°F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. KEEP OUT OF REACH OF CHILDREN.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION X
OTHER REGULATORY INFORMATION

SARA 313 (40 CFR 372.65c) SUPPLIER NOTIFICATION

| CAS NO. | CHEMICAL/COMPOUND | % by WT | % Element |
|-----------|---------------------|---------|-----------|
| 75-09-2 | Methylene Chloride | 15 | |
| 108-88-3 | Toluene | 6 | |
| 100-41-4 | Ethylbenzene | 3 | |
| 1330-30-7 | Xylene | 15 | |
| 78-93-3 | Methyl Ethyl Ketone | 9 | |
| | Glycol Ethers | 4 | |

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA inventory.

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MATERIAL SAFETY DATA SHEET

Identity

MSDS # 502

Ceramic Sealers: SS 331 Clear Gloss; SS 332 Clear Matte; SS 333 Translucent Pearl; SS 334 Porcelain; SS 339 Super Matte

SECTION I

Manufacturer's Name

Plasti-Kote Co., Inc.

Address

1000 Lake Road
Medina, OH 44256

Emergency Telephone Number

(216) 725-4511

Telephone Number

(216) 725-4511

Date Prepared Revised

March 1988

May 1998

Prepared By

Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

| INGREDIENT | CAS NUMBER | ACGIH TWA PPM | OSHA PEL PPM | OTHER TLV PPM | VAPOR PRESSURE mmHg at 20 °C | SS 331 % Wt. | SS 332 % Wt. | SS 333 % Wt. | SS 334 % Wt. |
|---------------------------|------------|------------------|-----------------|------------------|---------------------------------|--------------|--------------|--------------|--------------|
| *Acetone | 67-64-1 | 750 | 1000 | --- | 186 | 12-16 | 40-42 | 30-33 | |
| Aromatic Hydrocarbon | 64742-95-6 | NE | NE | 100 | 3 | 0-4 | | | |
| Ethyl Acetate | 141-78-6 | 400 | 400 | --- | 69 | | 5-7 | 18-20 | |
| Ethyl Alcohol | 64-17-5 | 1000 | 1000 | --- | 40 | | | 0-2 | |
| Ethyl 3-Ethoxy Propionate | 763-69-9 | NE | NE | 50 | .67 | | 7-9 | 5-7 | |
| Isobutyl Acetate | 110-19-0 | 150 | 150 | --- | 12.8 | | 14-16 | 14-16 | |
| *METHYLENE CHLORIDE | 75-09-2 | 50 | 500 | --- | 340 | 10-12 | | | |
| Methyl Ethyl Ketone | 78-93-3 | 200 | 200 | --- | 70 | | | 2-4 | |
| *Toluene | 108-88-3 | 100 | 100 | --- | 22 | 36-42 | | | |
| *Xylene | 1330-20-7 | 100 | 100 | --- | 5.1 | | | 0-1 | |
| Propane-Isobutane Mixture | 68476-86-8 | NE | 1000 | --- | --- | 23 | 19 | 19 | |

*THIS CHEMICAL IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)

133 - 331°F

Melting Point, (DEG°F)

Est. min. 1500°F

Specific Gravity (Water=1):

< 1

Appearance And Odor

Typical solvent paint

pH

n/a

Percent Volatile by Volume (%)

90

Vapor Pressure, (MM HG.)

Not known.

Vapor Density (AIR=1)

Heavier than air

Water Solubility, %

Slight to moderate

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

> 1

> 1 propellants

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

Propellant = 100°F

Extinguishing Media

"Alcohol" Foam, CO₂, Dry Chemical

Special Fire Fighting Procedures

Water spray may be ineffective. Water may be used to cool closed containers. If water is used, fog nozzles are preferable. Use self-contained breathing apparatus.

Unusual Fire And Explosion Hazards

Closed containers may explode and/or autoignite when exposed to extreme heat. Vapors are heavier than air and may travel along the ground or may be moved by ventilation. Remove all sources of ignition.

Flammable Limits

LEL 1.0

UEL n/a

Stability

Conditions To Avoid

Heat, sparks, and open flame.

SECTION V REACTIVITY DATA

Unstable:

Stable: X

Incompatibility (Materials To Avoid)

Strong oxidizing agents, heat, alkalies, hot surfaces and reactive metals.

Hazardous Decomposition or Byproducts

May form toxic materials, carbon dioxide/carbon monoxide, various hydrocarbons, nitrogen compounds, etc., when burned.

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI**HEALTH HAZARD DATA****Routes Of Entry**

Inhalation? yes

Skin? yes

Ingestion? no

Eyes? yes

Health Hazards (Acute and Chronic)**Acute:**

Breathing: Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even asphyxiation. Methylene chloride has caused loss of consciousness and death as low as 10,000ppm and causes numbness in arms and legs plus rapid heartbeat above 7,000ppm.

Eye Contact: Can cause severe irritation, redness, tearing, blurred vision. Contact lenses should not be worn.

Swallowing: Can cause gastrointestinal irritation, nausea, vomiting, diarrhea.

Skin Contact: Methylene chloride is painful and irritating if confined to skin by gloves, clothing, etc.

Chronic:

None known for product(s) in Section I. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage, severe overexposure in laboratory animals has also caused liver abnormalities and damage to kidneys, lungs, and spleen. Deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogenicity

NTP? yes

IARC Monographs? yes

OSHA Regulated? no

Signs And Symptoms of Exposure

See Health Hazards.

Medical Conditions Generally Aggravated by Exposure

Can cause allergic respiratory and/or skin reaction

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes. Holding eyelids open. Get medical attention.

Skin contact: Wash with soap and water. Wash clothing before re-use.

Inhalation: Remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing is stopped, give CPR and seek medical help.

Ingestion: Do not induce vomiting (aspiration of material into lungs can cause chemical pneumonitis, which can be fatal.) Get medical attention.

SECTION VII**PRECAUTIONS FOR SAFE HANDLING****Steps To Be Taken In Case Material Is Released Or Spilled**

Eliminate all ignition sources, ventilate area, absorb liquid on absorbent material and transfer to a closed closed container.

Waste Disposal Method

Dispose of in accordance with Local, State, and Federal regulations.

Precautions To Be Taken In Handling And Storing

Do not store in areas above 120°F, or in direct sunlight, or near heat or open flames. Do not puncture or incinerate.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES**Respiratory Protection (Specify Type)**

If spraying, do not inhale mist. Use respirator that is NIOSH/MSHA TC23C or equivalent. For organic vapors if TLV's are exceeded.

Ventilation**Local Exhaust**

Recommended

Special

Use respirator when spraying

Other

none

Eye Protection

yes

Mechanical (General)

Recommended when spraying

Protective Gloves

Yes, chemical resistant (Neoprene)

Other Protective Clothing Or Equipment

Solvent-resistant boots, apron, headgear and/or face shield should be worn where splashing is possible.

Work/Hygienic Practices

Wear protective clothing that is removed before eating, drinking, smoking, or leaving work. Wash thoroughly, immediately after spraying.

Good hygiene practices should be followed.

SECTION IX**ADDITIONAL INFORMATION****CALIFORNIA PROPOSITION 65**

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

CAUTION**CONFORMS TO
ASTM D-4236**

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MATERIAL SAFETY DATA SHEET

Identity

Natural Touch Colors: SS 335 Snowdrift; SS 338 Ebony Black;

MSDS # 503

Manufacturer's Name

Plasti-Kote Co., Inc.

Address

1000 Lake Road
Medina, OH 44256

SECTION I

Emergency Telephone Number

(216) 725-4511

Telephone Number

(216) 725-4511

Date Prepared Revised

March 1988

May 1995

Prepared By

Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

| INGREDIENT | CAS NUMBER | ACGIH | OSHA TWA PPM | OTHER PPM | VAPOR PRESSURE mmHg at 20 C | SS 335, SS 336, SS 337, SS 338, SS 340, SS 341, SS 342 % Wt. |
|---------------------------|------------|-------|-----------------|--------------|-----------------------------------|--|
| *Acetone | 67-64-1 | 750 | 1000 | --- | 186 | 35-45 |
| Ethyl Acetate | 141-78-6 | 400 | 400 | --- | 69 | 2-10 |
| Ethyl Alcohol | 64-17-5 | 1000 | 1000 | --- | 40 | 0-3 |
| Ethyl 3-Ethoxy Propionate | 763-69-9 | NE | NE | 50 | .67 | 2-5 |
| Isobutyl Acetate | 110-19-0 | 150 | 150 | --- | 12.8 | 8-12 |
| Isopropyl Alcohol | 67-63-0 | 400 | 400 | --- | 33 | 0-5 |
| Methyl Ethyl Ketone | 78-93-3 | 200 | 200 | --- | 70 | 2-5 |
| *P.M. Acetate | 108-65-6 | --- | --- | 100 | 1.8 | 0-5 |
| *Xylene | 1330-20-7 | 100 | 100 | 00 | 5.1 | 1-2 |
| Propane-Isobutane Mixture | 68476-86-8 | NE | 1000 | --- | --- | 19 |

*THIS CHEMICAL IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)

133 - 331°F

Melting Point, (DEG°F)

Est. min. 1500°F

Specific Gravity (Water=1):

< 1

Appearance And Odor

Typical solvent paint

pH

n/a

Percent Volatile by Volume (%)

80 - 90

Vapor Pressure, (MM HG.)

Not known.

Vapor Density (AIR=1)

Heavier than air

Water Solubility, %

Slight to moderate

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

> 1

> 1 propellants

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

Propellant = 100°F

Extinguishing Media

"Alcohol" Foam, CO₂, Dry Chemical

Special Fire Fighting Procedures

Waterspray may be ineffective. Water may be used to cool closed containers. If water is used, fog nozzles are preferable. Use self-contained breathing apparatus.

Unusual Fire And Explosion Hazards

Closed containers may explode and/or autoignite when exposed to extreme heat. Vapors are heavier than air and may travel along the ground or may be moved by ventilation. Remove all sources of ignition.

Flammable Limits

LEL 1.0

UEL n/a

SECTION V REACTIVITY DATA

Stability

Stable: X

Conditions To Avoid

Heat, sparks, and open flame.

Incompatibility (Materials To Avoid)

Strong oxidizing agents, heat, alkalies, hot surfaces and reactive metals.

Hazardous Decomposition or Byproducts

May form toxic materials, carbon dioxide/carbon monoxide, various hydrocarbons, nitrogen compounds, etc., when burned.

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI**HEALTH HAZARD DATA****Routes Of Entry**

Inhalation? yes

Skin? yes

Ingestion? no

Eyes? yes

Health Hazards (Acute and Chronic)**Acute:**

Breathing: Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even asphyxiation. Methylene chloride has caused loss of consciousness and death as low as 10,000ppm and causes numbness in arms and legs plus rapid heartbeat above 7,000ppm.

Eye Contact: Can cause severe irritation, redness, tearing, blurred vision. Contact lenses should not be worn.

Swallowing: Can cause gastrointestinal irritation, nausea, vomiting, diarrhea.

Skin Contact: Methylene chloride is painful and irritating if confined to skin by gloves, clothing, etc.

Chronic:

None known for product(s) in Section 1. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage, severe overexposure in laboratory animals has also caused liver abnormalities and damage to kidneys, lungs, and spleen. Deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogenicity

NTP? yes

IARC Monographs? yes

OSHA Regulated? no

Signs And Symptoms of Exposure

See Health Hazards.

Medical Conditions Generally Aggravated by Exposure

Can cause allergic respiratory and/or skin reaction

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes. Holding eyelids open. Get medical attention.

Skin contact: Wash with soap and water. Wash clothing before re-use.

Inhalation: Remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing is stopped, give CPR and seek medical help.

Ingestion: Do not induce vomiting (aspiration of material into lungs can cause chemical pneumonitis, which can be fatal.) Get medical attention.

SECTION VII**PRECAUTIONS FOR SAFE HANDLING****Steps To Be Taken In Case Material Is Released Or Spilled**

Eliminate all ignition sources, ventilate area, absorb liquid on absorbent material and transfer to a closed closed container.

Waste Disposal Method

Dispose of in accordance with Local, State, and Federal regulations.

Precautions To Be Taken In Handling And Storing

Do not store in areas above 120°F, or in direct sunlight, or near heat or open flames. Do not puncture or incinerate.

Other Precautions

n/a

SECTION VIII**CONTROL MEASURES****Respiratory Protection (Specify Type)**

If spraying, do not inhale mist. Use respirator that is NIOSH/MSHA TC23C or equivalent. For organic vapors if TLV's are exceeded.

Ventilation**Local Exhaust**

Recommended

Special

Use respirator when spraying

Mechanical (General)

Recommended when spraying

Other

none

Protective Gloves

Yes, chemical resistant (Neoprene)

Eye Protection

yes

Other Protective Clothing Or Equipment

Solvent-resistant boots, apron, headgear and/or faceshield should be worn where splashing is possible.

Work/Hygienic Practices

Wear protective clothing that is removed before eating, drinking, smoking, or leaving work. Wash thoroughly, immediately after spraying.

Good hygiene practices should be followed.

SECTION IX**ADDITIONAL INFORMATION****CALIFORNIA PROPOSITION 65**

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



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MATERIAL SAFETY DATA SHEET

Identity
Granite Stone Sealer SP 601

MSDS # 504

Manufacturer's Name

Plasti-Kote Co., Inc.

Address

1000 Lake Road
Medina, OH 44256

Emergency Telephone Number

(216) 725-4511

Telephone Number

(216) 725-4511

Date Prepared

April 1994

Revised

May 1995

Prepared By

Scott Mattison

SECTION I

Hazardous Components

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|-----------------------------------|----------|-----------|------------|-----|
| Methylene Chloride | 500 ppm | 100 ppm | 75-09-2 | 15% |
| Acetone | 1000 ppm | 750 ppm | 67-64-1 | 15% |
| Toluene | 100 ppm | 100 ppm | 108-88-3 | 42% |
| 100 Flash Aromatic Naphtha | 100 ppm | 100 ppm | 64742-95-6 | 5% |
| Propellant Blend | | | | 23% |
| Propane | 1000 ppm | NE | 74-98-4 | |
| Isobutane | NE | NE | 75-28-5 | |
| Butane | NE | NE | 106-97-8 | |
| Acrylic Polymer Proprietary blend | | | | 15% |
| Silica | | | | 5% |

SECTION II HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|-----------------------------------|----------|-----------|------------|-----|
| Methylene Chloride | 500 ppm | 100 ppm | 75-09-2 | 15% |
| Acetone | 1000 ppm | 750 ppm | 67-64-1 | 15% |
| Toluene | 100 ppm | 100 ppm | 108-88-3 | 42% |
| 100 Flash Aromatic Naphtha | 100 ppm | 100 ppm | 64742-95-6 | 5% |
| Propellant Blend | | | | 23% |
| Propane | 1000 ppm | NE | 74-98-4 | |
| Isobutane | NE | NE | 75-28-5 | |
| Butane | NE | NE | 106-97-8 | |
| Acrylic Polymer Proprietary blend | | | | 15% |
| Silica | | | | 5% |

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)
104-308°F

Vapor Pressure, (MM HG.)

Not known.

Melting Point, (DEG°F)
Est. min. 1500°F

Vapor Density (AIR=1)

> 1

Specific Gravity (Water=1):
< 1

Water Solubility, %

Slight to moderate

Appearance And Odor
Typical solvent paint

Freezing Point

n/a

pH
n/a

Evaporation Rate (Butyl Acetate=1)

> 1

> 1 propellants

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

Flammable Limits

LEL 1.2

UEL n/a

Propellant = 100°F

Extinguishing Media

"Alcohol" Foam, CO₂, Dry Chemical

Special Fire Fighting Procedures

Water spray may be ineffective. Water may be used to cool closed containers. If water is used, fog nozzles are preferable.

Use self-contained breathing apparatus.

Unusual Fire And Explosion Hazards

Closed containers may explode and/or autoignite when exposed to extreme heat. Vapors are heavier than air and may travel along the ground or may be moved by ventilation. Remove all sources of ignition.

SECTION V REACTIVITY DATA

Stability

Unstable:

Stable: X

Conditions To Avoid

Heat, sparks and open flame.

Incompatibility (Materials To Avoid)

Strong oxidizing agents, heat, alkalies, hot surfaces and reactive metals. **Hazardous Decomposition or Byproducts**

May form toxic materials, carbon dioxide/carbon monoxide, various hydrocarbons, nitrogen compounds, etc., when burned.

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry**Inhalation?** yes**Skin?** yes**Ingestion?** yes**Health Hazards (Acute and Chronic)****Acute:**

Breathing

Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even asphyxiation. Methylene chloride has caused loss of consciousness and death as low as 10,000ppm, and causes numbness in arms and legs plus rapid heartbeat above 7,000ppm.

Eye Contact

Can cause severe irritation, redness, tearing, blurred vision. Contact lenses should not be worn.

Swallowing

Can cause gastrointestinal irritation, nausea, vomiting, diarrhea.

Skin Contact

Methylene chloride is painful and irritating if confined to skin by gloves, clothing, etc.

Chronic:

None known for product(s) in Section 1. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage, severe overexposure in laboratory animals has also caused liver abnormalities and damage to kidneys, lungs and spleen. Deliberately concentrating and inhaling the contents may be harmful or fatal.

Carcinogenicity**NTP?** yes**IARC Monographs?** yes**OSHA Regulated?** no**Signs And Symptoms of Exposure**

See Health Hazards.

Medical Conditions Generally Aggravated by Exposure

Can cause allergic respiratory and/or skin reaction.

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes, occasionally holding eyelids open. Get medical attention.

Skin contact: Wash with soap and water. Wash clothing before re-use.

Inhalation: Remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing is stopped, give CPR.

Ingestion: Do not induce vomiting (aspiration of material into lungs can cause chemical pneumonitis, which can be fatal.)
Get medical attention.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Eliminate all ignition sources, ventilate area, absorb liquid on absorbent material and transfer to a closed container.

Waste Disposal Method

Dispose in accordance with Local, State and Federal regulations.

Precautions To Be Taken In Handling And Storing

Do not store in areas above 120°F, or in direct sunlight, or near heat or open flames. Do not puncture or incinerate.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If spraying, do not inhale mist. Use respirator that is NIOSH/MSHA TC23C or equivalent. For organic vapors if TLV's are exceeded..

Ventilation**Local Exhaust**

Recommended

Special

Use respirator when spraying.

Other

None

Protective Gloves

yes

Mechanical (General)

Recommended when spraying.

Eye Protection

yes

Other Protective Clothing Or Equipment

Solvent-resistant boots, apron, headgear and/or face shield should be worn where splashing is possible.

Work/Hygienic Practices

Wear protective clothing that is removed before eating, drinking, smoking, or leaving work. Wash thoroughly, immediately after spraying.

Good hygiene practices should be followed.

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

CAUTION**CONFORMS TO
ASTM D-4236**

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MATERIAL SAFETY DATA SHEET

Identity

Wax Resist SY 547

MSDS # 601

SECTION I**Manufacturer's Name**

Knapp Manufacturing

AddressP.O. Box 7995
Fresno, CA 93747**Emergency Telephone Number**

Chem-Tel (800) 255-3924

Telephone Number

(559) 251-8254

Date Prepared

September 1987

Revised

September 1999

Prepared By

Scott Mattison

NFPA 704 DESIGNATION HAZARD RATING

| | | |
|---|---|---------------|
| 4 | = | Extreme |
| 3 | = | High |
| 2 | = | Moderate |
| 1 | = | Slight |
| 0 | = | Insignificant |

| | | |
|------------|---|----|
| Fire | = | 0 |
| Health | = | 1 |
| Reactivity | = | 0 |
| Special | = | -- |

Product Name

SY 547 Wax Resist

Synonym/Chemical name/Common name:

DOT hazard class:

Proper shipping name:

Knapp inventory number:

Wax Emulsion

Not classified as hazardous by DOT

Compound, cleaning, liquid

35017

SECTION II
HAZARDOUS INGREDIENTS**Hazardous Components****Wt. %****Toxicity Data**

None

Other Information

This product contains no chemical at a level which poses a significant risk as defined by California Proposition 65.

This product contains no toxic chemical, above its de minimis concentration, subject to reporting requirements of Title III SARA, Section 313 EPCRA (40 CAR 372.)

SECTION III
PHYSICAL DATA**Boiling Point, (DEG°F)**

212°F

Melting Point, (DEG°F)

n/a

Specific Gravity (Water=1):

0.97

Appearance And Odor

Light blue-green liquid with bland odor

pH (Undiluted)

4.3 to 5.0

Percent Volatile by Wt. (%)

58.0

Vapor Pressure, (MM HG.)

17.2 (water)

Vapor Density (AIR=1)

No vapors are produced

Water Solubility, %

Miscible

Freezing Point

32°F

Evaporation Rate (Butyl Acetate=1)

1

SECTION IV
FIRE AND EXPLOSION HAZARD DATA**Flash Point (Method Used)**

n/a

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

Treat primary fire

Special Fire Fighting Procedures

None. Will not burn.

Unusual Fire And Explosion Hazards

None.

SECTION V
REACTIVITY DATA

| | | |
|--|-------------------|--------------------------|
| Stability | Unstable: | Stable: X |
| Conditions To Avoid | | |
| n/a | | |
| Incompatibility (Materials To Avoid) | | |
| None are known | | |
| Hazardous Decomposition or Byproducts | | |
| n/a | | |
| Hazardous Polymerization | May Occur: | Will Not Occur: X |
| Conditions To Avoid | | |
| n/a | | |

SECTION VI
HEALTH HAZARD DATA

| | | | |
|---|-----------------------|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? no | Skin? no | Ingestion? no |
| Health Hazards (Acute and Chronic) | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| Product is irritating to eyes. | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasive, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: Flush with water at least 15 minutes. If irritation persists, contact a physician. | | | |
| Skin contact: Wash with soap and water. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING**Steps To Be Taken In Case Material Is Released Or Spilled**

Wet material is slippery. Spilled material will dry hard and difficult to remove. Remove with rags, mops, or by flushing with water.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Do not expose to freezing temperatures.

Other Precautions

None

SECTION VIII
CONTROL MEASURES**Respiratory Protection (Specify Type)**

None

Ventilation**Local Exhaust**

Use with adequate ventilation

Special**Mechanical (General)**

Recommended when spraying

Protective Gloves

Yes, rubber gloves are recommended for prolonged or repeated contact.

n/a**Other****Other Protective Clothing Or Equipment**

Clean spray booth filters often.

Eye Protection

Yes, Guard against splashing into eyes.

Work/Hygienic Practices

Wear protective clothing that is removed before eating, drinking, smoking, or leaving work. Wash thoroughly, immediately after spraying.

SECTION IX
ADDITIONAL INFORMATION**CALIFORNIA PROPOSITION 65**

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



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MATERIAL SAFETY DATA SHEET

Identity

Mask 'n Peel SY 548 and Write & Peel SY 555

MSDS # 602

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

| | |
|----------|--------------------------------------|
| Health 2 | Reactivity 0 |
| Fire 0 | Protective Equip. G (if spraying) |

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared Revised

September 1996

March 1, 1999

Prepared By

Frank Peters

SECTION II HAZARDOUS INGREDIENTS

Hazardous Components

Ammonia

Other Information

OSHA PEL

50 ppm

ACGIH TLV

25 ppm

CAS

7664-41-7

%

SECTION III PHYSICAL DATA

Boiling Point, (DEG°F)

212°F

Vapor Pressure, (MM HG.)

n/a

Melting Point, (DEG°F)

n/a

Vapor Density (AIR=1)

n/a

Specific Gravity (Water=1):

0.96

Water Solubility, %

n/a

Appearance And Odor

Cream colored liqued with slight ammonia odor

Freezing Point

n/a

pH

9.5 - 10.0

Evaporation Rate (Butyl Acetate=1)

1

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

Water, carbon dioxide, or dry chemical for dried film.

Special Fire Fighting Procedures

Wear self-contained breathing apparatus approved by NIOSH. Use water spray to keep containers cool, keep spillage away from fire and heat, and to knock down vapors.

Unusual Fire And Explosion Hazards

Burning dry latex produces dense, black smoke with the potential for toxic vapors.

SECTION V REACTIVITY DATA

Stability

Unstable:

Stable: X

Conditions To Avoid

Avoid temperature extremes

Incompatibility (Materials To Avoid)

Solvents, acids, metal salts, and other compounds which may coagulate latex.

Hazardous Decomposition or Byproducts

Thermal decomposition may produce toxic gases.

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

| | | | |
|--|--|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? yes | Skin? no | Ingestion? yes |
| Health Hazards (Acute and Chronic) Ammonia causes reversible eye and throat irritation and respiratory distress. | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure n/a | | | |
| Medical Conditions Generally Aggravated by Exposure n/a | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: | Flush with water at least 15 minutes. If irritation persists, contact a physician. | | |
| Skin contact: | Wash with soap and water. Contact a physician. | | |
| Inhalation: | Move the exposed person to fresh air. | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Confine spill to prevent contamination of sewer system or ground water. Absorb liquid onto an appropriate absorbent. Spillage will cause slippery conditions.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Avoid temperature extremes. Keep from freezing. When using, do not eat, drink, or smoke. Wash hands immediately after use. Keep sealed.

Keep out of reach of children.

Other Precautions

None

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

When permissible exposure limits (PEL) are exceeded, use mask supplied with external air or other NIOSH approved respiratory protection.

Ventilation**Local Exhaust**

Recommended

Special

Use respirator when spraying

Mechanical (General)**Other**

Recommended when spraying

Protective Gloves

yes

Yes, vinyl or rubber

Other Protective Clothing Or Equipment

Safety shower and eye wash stations.

Eye Protection**Work/Hygienic Practices**

Use good work hygiene practices.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

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MATERIAL SAFETY DATA SHEET

Identity

Kiln Wash KA 400 and KA 401

MSDS # 603

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

| | |
|----------|--------------------------------------|
| Health 3 | Reactivity 0 |
| Fire 0 | Protective Equip. F (if spraying) |

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared Revised

September 1987 March 1, 1999

Prepared By

Scott Mattison

SECTION II

HAZARDOUS INGREDIENTS

Hazardous Components

| | | | | |
|----------------------------|------------------------------------|-------------------------------------|---------------------|---------------|
| Silica, Crystalline-Quartz | OSHA PEL 0.19 mg/m ³ | ACGIH TLV 0.19 mg/m ³ | CAS # 14808-60-7 | % Up to 50 |
| Kaolin | ----- | ----- | 1332-58-7 | 0-33 |
| Aluminum Hydrate | ----- | ----- | 21645-51-2 | 0-16 |

Boiling Point, (DEG°F)

n/a

Melting Point, (DEG°F)

> 3800°F

Specific Gravity (Water=1):

> 1

Appearance And Odor

Cream colored powder

pH

n/a

Vapor Pressure, (MM HG.)

n/a

Vapor Density (AIR=1)

n/a

Water Solubility, %

n/a

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

n/a

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

n/a

Special Fire Fighting Procedures

None. Will not burn.

Unusual Fire And Explosion Hazards

None.

SECTION V REACTIVITY DATA

Stability

Unstable: Stable: X

Conditions To Avoid

n/a

Incompatibility (Materials To Avoid)

n/a

Hazardous Decomposition or Byproducts

n/a

May Occur: Will Not Occur: X

Hazardous Polymerization

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry

Health Hazards (Acute and Chronic)
 See Signs and Symptoms of Exposure

Carcinogenicity**Signs And Symptoms of Exposure**

May cause irritation to sensitive or sensitized skin. Congestion and irritation of the upper respiratory system. Eyes: Burning sensation, irritation or inflammation.

Medical Conditions Generally Aggravated by Exposure

Abrasives, can scratch eyes.

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes. Contact a physician if irritation persists.

Skin contact: Wash with soap and water.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Wash hands after use. Keep container sealed. Keep out of reach of children.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

Use a NIOSH approved dust and mist respirator for lead such as 3m 8710 or equivalent.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Recommended when spraying

Protective Gloves

no

Special

Use respirator when spraying

Other

None

Eye Protection

yes

Other Protective Clothing Or Equipment

Clean spray booth filters often.

Work/Hygienic Practices

Good hygiene practices should be followed.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



*Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist.
 The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236.*

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity

Hobby Casting Slip and Doll Casting Slip DC 100

MSDS # 604

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

| | |
|----------|--------------------------------------|
| Health 0 | Reactivity 0 |
| Fire 1 | Protective Equip. G (if spraying) |

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared

August 1987

Revised

March 1, 1999

Prepared By

Scott Mattison

Hazardous Components

none

Other Information

none

SECTION II

HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % |
|----------------------|----------|-----------|-------|---|
| none | | | | |

SECTION III
PHYSICAL DATA

Boiling Point, (DEG°F)

212°F

Melting Point, (DEG°F)

1800°F

Specific Gravity (Water=1):

1.7

Appearance And Odor

Opaque colored latex paint

pH

n/a

Vapor Pressure, (MM HG.)

n/a

Vapor Density (AIR=1)

n/a

Water Solubility, %

Insoluble

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

As water

SECTION IV
FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Extinguishing Media

n/a

Special Fire Fighting Procedures

None. Will not burn.

Unusual Fire And Explosion Hazards

None

Flamable Limits

LEL n/a

UEL n/a

Stability

Unstable:

Stable: X

Conditions To Avoid

n/a

Incompatibility (Materials To Avoid)

n/a

Hazardous Decomposition or Byproducts

n/a

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

| | | | |
|---|-----------------------|----------------------------|----------------------|
| Routes Of Entry | Inhalation? no | Skin? no | Ingestion? no |
| Health Hazards (Acute and Chronic) | | | |
| None. Nontoxic. | | | |
| Carcinogenicity | NTP? no | LARC Monographs? no | |
| Signs And Symptoms of Exposure | | | |
| n/a | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Abrasive, can scratch eyes. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: Flush with water at least 15 minutes. Skin contact: Wash with soap and water. | | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Put paper towels in trash and rinse out sponge.

Precautions To Be Taken In Handling And Storing

Keep container sealed.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If spraying, do not inhale mist. Use respirator that is NIOSH approved for sprays and mists.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Recommended when spraying.

Protective Gloves

no

Other Protective Clothing Or Equipment

None needed.

Work/Hygienic Practices

Good hygiene practices should be followed.

Special

Use respirator when spraying

Other

none

Eye Protection

yes.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA Proposition 65

n/a



*Products bearing the Nontoxic Product Seal are certified in a program to toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c)."

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity

Kiln Cement and Sealer KA 410

MSDS # 605

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

Health 3 Reactivity 0
Fire 0 Protective Equip. F
(if spraying)

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared Revised

September 1987 May 1995

Prepared By

Scott Mattison

SECTION II

HAZARDOUS INGREDIENTS

Hazardous Components

*Silica, Crystalline-Quartz

OSHA PEL

0.25 mg/m³

ACGIH TLV

0.25 mg/m³

CAS

14808-60-7

%

Up to 21

Other information

*Airborne dusts from these mortars will contain silica dioxide

SECTION III

PHYSICAL DATA

Boiling Point, (DEG°F)

n/a

Vapor Pressure, (MM HG.)

n/a

Melting Point, (DEG°F)

n/a

Vapor Density (AIR=1)

n/a

Specific Gravity (Water=1):

> 1

Water Solubility, %

> 30

Appearance And Odor

Gray fine to granular solid, odorless

Freezing Point

n/a

pH

n/a

Evaporation Rate (Butyl Acetate=1)

As water

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

n/a

Special Fire Fighting Procedures

None. Will not burn.

Unusual Fire And Explosion Hazards

None.

SECTION V

REACTIVITY DATA

Stability

Unstable: Stable: X

Conditions To Avoid

n/a

Incompatibility (Materials To Avoid)

n/a

Hazardous Decomposition or Byproducts

n/a

May Occur: Will Not Occur: X

Hazardous Polymerization

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

| | | | |
|---|------------------------|---|-----------------------|
| Routes Of Entry | Inhalation? yes | Skin? yes | Ingestion? yes |
| Health Hazards (Acute and Chronic) | | Congestion and irritation to upper respiratory system, skin irritation, eye irritation, irritation to GI tract. | |
| Carcinogenicity | NTP? no | IARC Monographs? | no |

Signs And Symptoms of Exposure

Inhalation: Congestion and irritation of the upper respiratory system.
 Eyes: Burning sensation, irritation or inflammation.
 Ingestion: Irritation to the GI tract.

Medical Conditions Generally Aggravated by Exposure

Abrasive, can scratch eyes.

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes. Contact a physician if irritation persists.
 Skin contact: Wash with soap and water.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with vacuum.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Keep mortar dry.

Other Precautions

None

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

Use a respirator such as 3M990 or equivalent, especially during removal or tear-outs.

Ventilation

Local Exhaust

Recommended

Special

Use respirator when spraying

Other

None

Eye Protection

yes

Mechanical (General)

Recommended when spraying

Protective Gloves

Yes, plastic or rubber gloves

Other Protective Clothing Or Equipment

None

Work/Hygienic Practices

Good hygiene practices should be followed.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236.

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MATERIAL SAFETY DATA SHEET

Identity

Gold Dust AS 961

MSDS # 606

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

| | | |
|----------------|--------------------------------------|--|
| Health 1 | Reactivity 1 | Emergency Telephone Number (559) 291-4444 |
| Flammability 1 | Protective Equip. E (if spraying) | Telephone Number (559) 291-4444 |

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared

April 1990

Revised

January 2001

Prepared By

Scott Mattison

SECTION II
HAZARDOUS INGREDIENTS

Hazardous Components

Palegold - 17, 24, 113A, 109, 201, 251, 251A, 271, 309P, 325P, 351, 400P, 595, 8000
Richgold - 14, 40, 52, 113, 202, 252, 309R, 325R, 352, 400R.
Rich Palegold - 11, 22, 59, 77, 177, 254, 325RP, 354, 400RP.
Deep/Greengolds - 18, 26, 31, 34, 35, 117, 118, 255, 255A, 256, 325D, 400D, 813.
Copper - 27, 64, 104, 130, 205, 215 224, 253, 325C, 353, 400C.
Vault Colors - V798-24 V798-25,
Miscellaneous Colors - 5, 6, 8, 15, 16, 19.

| Ingredient Name: | TLV/TWA | PEL | STEL | CAS # | % by Wt. |
|------------------|---------------------|---------------------|---------------------|-----------|----------|
| Copper(*) | 1 mg/m ³ | 1 mg/m ³ | 1 mg/m ³ | 7440-50-8 | 70-98 |
| Zinc (*) | 5 mg/m ³ | N.E. | N.E. | 7440-66-6 | 0-29 |
| Stearic Acid | N.E. | N.E. | N.E. | 57-11-4 | .5-2 |

Other Information

The products listed in Section I contain these chemicals which are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (SARA Title III) and 40 CFR 372.

Copper and Zinc also appear on the TSCA inventory list and have been assigned numbers A546-0888 & B823-4379, respectively.

SECTION III
PHYSICAL DATA

Boiling Point, (DEG°F)

Copper: 4,653°F; Zinc 1,665°F

Melting Point, (DEG°F)

Copper 1982°F; Zinc 787°F

Specific Gravity (Water=1):

Copper 8.92; Zinc 7.14

Appearance And Odor

Metallic looking powder with little odor.

pH

n/a

Percent Volatile by Wt. (%)

n/a

Vapor Pressure, (MM HG.)

n/a

Vapor Density (AIR=1)

n/a

Water Solubility, %

Insoluble

Freezing Point

n/a

Evaporation Rate (Butyl Acetate=1)

n/a

SECTION IV
FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Flammable Limits

LEL Not Established

UEL Not Established

Extinguishing Media

NFPA class D Dry Chemical equipped with a low velocity nozzle. Sand or another inert material may be used to smother burning pigment. Water may be used to cool closed containers if exposed to extreme heat.

Special Fire Fighting Procedures

DO NOT use fire extinguishers containing halogenated hydrocarbons to extinguish burning material. Since this powder contains zinc, it may react violently with these types of extinguishing agents. Firefighters should wear self-contained breathing apparatus.

Unusual Fire And Explosion Hazards

See above.

SECTION V
REACTIVITY DATA

| | | |
|--|-------------------|--------------------------|
| Stability | Unstable: | Stable: X |
| Conditions To Avoid | | |
| n/a | | |
| Incompatibility (Materials To Avoid) | | |
| Strong alkalis, chlorates, bromates, mineral acids ad other strong oxidizing agents. | | |
| Hazardous Decomposition or Byproducts | | |
| Decomposition may yield hydrogen and noxious copper compounds. | | |
| Hazardous Polymerization | May Occur: | Will Not Occur: X |
| Conditions To Avoid | | |
| See above | | |

SECTION VI
HEALTH HAZARD DATA

| | | | |
|--|--|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? yes | Skin? yes | Ingestion? yes |
| Health Hazards (Acute and Chronic) | | | |
| Copper and copper/zinc alloy dusts are eye and mucous membrane irritants and skin sensitizers. Acute exposure may cause redness of the eyes and dermatitis. Prolonged exposure to airborne particulate may cause acute irritation of the nose and trachea resulting in a metallic taste or nasal ulceration. If expose to extremely high temperatures, zinc metal fumes can result in symptoms known as "metal fume fever". Ingestion of copper compounds may cause vomiting and collapse. | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| Acute poisoning is characterized by hemolysis, jaundice, anuria, hypotension and convulsions. | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Persons with pre-existing chronic respiratory problems and/or impaired pulmonary function, could suffer increased discomfort. Additionally, persons with obstructive airway diseases, pre-existing kidney, liver, skin or blood disorders, or those having been diagnosed with Wilson's disease, may find their condition further aggravated by exposure to this product. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: | Flush with water at least 15 minutes. Get medical attention immediately. Contact lenses should not be worn. | | |
| Skin contact: | Wash with soap and water. Get medical attention if irritation occurs/persists. | | |
| Inhalation: | Move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately. | | |
| Ingestion: | Emergency treatment - dilute with water or milk. Get medical attention immediately. | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Sweep gently to avoid dust cloud formation. Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

When using, do not eat, drink, or smoke. Wash hands immediately after use. Keep sealed. Keep out of reach of children.

Other Precautions

Avoid using if pregnant or contemplating pregnancy.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

Use a NIOSH approved dust and mist respirator for lead such as 3m 8710 or equivalent.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Recommended when spraying

Special

Use respirator when spraying

Other**Eye Protection**

Yes, splash goggles

Protective Gloves

Yes

Other Protective Clothing Or Equipment

Eye wash and safety shower are recommended if using this product in large concentrations..

Work/Hygienic Practices

Wear protective clothing that is removed before eating, drinking, smoking, or leaving work. Wash thoroughly when finished using this product.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

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MATERIAL SAFETY DATA SHEET

Identity
Diamond Dust AS 962

MSDS # 607

SECTION I

Manufacturer's Name
Potters Industries, Inc.
Address
20 Waterview Boulevard
Parsippany, NJ 07054
HMIS Codes
Health 1 Reactivity 0
Flammability 0 Protective Equip. F
(if spraying)

Emergency Telephone Number
(201) 299-2900
Telephone Number
(201) 299-2900
Date Prepared **Revised**
November 1987 May 1995
Prepared By
F.G. Widman

SECTION II HAZARDOUS INGREDIENTS

| Hazardous Components | OSHA PEL | ACGIH TLV | CAS # | % by Wt. |
|--|----------------------|----------------------|--------------|-----------------|
| Nuisance Dust (Particles not otherwise classified.) | 15 mg/m ³ | 10 mg/m ³ | ----- | ----- |
| Nuisance Dust - Respirable Fraction | 5 mg/m ³ | 5 mg/m ³ | ----- | ----- |
| Non-Hazardous Components | ----- | ----- | 65997-17-3 | 100 |
| Glass Oxide | ----- | ----- | | |

Other Information
None

SECTION III PHYSICAL DATA

| | |
|--|--|
| Boiling Point, (DEG°F) n/a | Vapor Pressure, (MM HG.) n/a |
| Melting Point, (DEG°F) n/a | Vapor Density (AIR=1) n/a |
| Specific Gravity (Water=1): 2.46 - 2.49 g/cc | Water Solubility, % Insoluble |
| Appearance And Odor Odorless white powder | Freezing Point n/a |
| pH n/a | Evaporation Rate (Butyl Acetate=1) n/a |
| Percent Volatile by Wt. (%) n/a | |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | |
|---|----------------------------|
| Flash Point (Method Used) n/a | Flammable Limits |
| | LEL n/a UEL n/a |
| Extinguishing Media Nonflammable | |
| Special Fire Fighting Procedures None | |
| Unusual Fire And Explosion Hazards None | |

SECTION V REACTIVITY DATA

| | | |
|--|-------------------|--------------------------|
| Stability | Unstable: | Stable: X |
| Conditions To Avoid n/a | | |
| Incompatibility (Materials To Avoid) Hydrofluoric Acid | | |
| Hazardous Decomposition or Byproducts None known | | |
| Hazardous Polymerization | May Occur: | Will Not Occur: X |
| Conditions To Avoid None known | | |

SECTION VI
HEALTH HAZARD DATA

| | | | |
|--|---|-----------------|----------------------|
| Routes Of Entry | Inhalation? yes | Skin? no | Ingestion? no |
| Health Hazards (Acute and Chronic) | | | |
| Dust in excess of recommended exposure limits may result in irritation to the respiratory tract. | | | |
| Carcinogenicity | | | |
| NTP? no | IARC Monographs? no | | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| Eye and respiratory irritation may result if recommended exposure limits are exceeded. | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| Chronic lung conditions may be aggravated by exposure to high concentrations of dust. | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: | Flush with water at least 15 minutes. Get medical attention immediately. Contact lenses should not be worn. | | |
| Skin contact: | Wash with soap and water. | | |
| Inhalation: | Move the exposed person to fresh air. | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Sweep up and discard. Avoid excessive dusting.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Spillage may result in slippery conditions. When transferring material, care should be taken to avoid dusting.

Other Precautions

This material is not a SARA Title III reportable substance.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

Use NIOSH approved dust and mist respirator for lead such as 3m 8710 or equivalent, if recommended exposure limits are exceeded..

Ventilation

Local Exhaust

Special

n/a

Recommended

Other

n/a

Mechanical (General)

Eye Protection

NIOSH approved safety glasses or goggles

Recommended when spraying

Protective Gloves

None

Other Protective Clothing Or Equipment

None

Work/Hygienic Practices

Use standard good manufacturing practices when handling material. Wash thoroughly when finished using this product.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

DISCLAIMER -- Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied.



MATERIAL SAFETY DATA SHEET

Identity
Silver Dust AS 963

MSDS # 608

SECTION I

Manufacturer's Name
Duncan Enterprises
Address
5673 E. Shields Ave.
Fresno, CA 93727
HMIS Codes
Health 1 Reactivity 3
Flammability 3 Protective Equip. E
 (if spraying)

Emergency Telephone Number
(209) 291-4444
Telephone Number
(209) 291-4444
Date Prepared **Revised**
October 1987 March 1, 1999
Prepared By
Scott Mattison

SECTION II HAZARDOUS INGREDIENTS

Hazardous Components
Aluminum - 7, 120, 200, 242, 325A, 400A, 623, 624-10.
Primary Colors - 1, 3, 4, 93.
Vault Colors - V798-26, V798-28, V798-32.

| Ingredient Name: | TLV/TWA | PEL | STEL | CAS # | % by Wt. |
|------------------|----------------------|----------------------|--------------------|------------|----------|
| Aluminum(*) | 10 mg/m ³ | 15 mg/m ³ | 5mg/m ³ | 7429-90-5 | 98-99 |
| Stearic Acid | N.E. | N.E. | N.E. | 57-11-4 | .5-2 |
| Isostearic Acid | N.E. | N.E. | N.E. | 30399-84-9 | .5-2 |

Other Information

The products listed in Section I contain these chemicals which are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (SARA Title III) and 40 CFR 372.

Aluminum also appear on the TSCA inventory list and have been assigned numbers A072-7839.

SECTION III PHYSICAL DATA

| | |
|---|--|
| Boiling Point, (DEG°F) 4,766°F | Vapor Pressure, (MM HG.) n/a |
| Melting Point, (DEG°F) n/a | Vapor Density (AIR=1) n/a |
| Specific Gravity (Water=1): 2.7 | Water Solubility, % Insoluble |
| Appearance And Odor Silver/Gray metallic looking powder with little odor. | Freezing Point n/a |
| pH n/a | Evaporation Rate (Butyl Acetate=1) n/a |
| Percent Volatile by Wt. (%) n/a | |

SECTION IV FIRE AND EXPLOSION HAZARD DATA

| | | |
|---|---|---------------------|
| Flash Point (Method Used) n/a | Flammable Limits LEL .035 oz. per cu. ft. | UEL Not Established |
| Extinguishing Media NEVER employ water as an extinguishing agent on aluminum fire. Water and aluminum, when combined, form hydrogen gas which can rapidly spread the fire. DO NOT use high velocity dry chemical extinguishing agents because they may disturb the burning powder to create a dangerous, potentially explosive, dust cloud. Sand or another inert material may be used to ring or dike the fire while allowing burning contents to extinguish itself. | | |
| Special Fire Fighting Procedures Firefighters should wear self-contained breathing apparatus. See above for other information. See National Fire Protection Assoc. NFPA-65 for further information on handling and processing aluminum powder. | | |
| Unusual Fire And Explosion Hazards Aluminum powder in bulk form is stable, but when suspended as airborne particulate, it can be potentially explosive. Use extreme care when transferring contents and use this product in areas deemed explosion proof. | | |

SECTION V
REACTIVITY DATA

Stability**Unstable:****Stable: X****Conditions To Avoid**

Use extreme caution when handling this product to avoid generating dust particulate. Aluminum will react with water to slowly generate hydrogen gas and heat. This reaction can be hazardous when attempting to store combined product in a sealed container as a results of extreme pressure build-up.

Incompatibility (Materials To Avoid)

Strong alkalies, chlorates, bromates, mineral acids, strong oxidizing agents, silver carbon dioxide, sulfur dichloride, palladium, manganese, magnesium plus potassium chloride, sodium carbonate, sulfates, diborane.

Hazardous Decomposition or Byproducts

Decomposition may yield hydrogen and noxious copper compounds.

Hazardous Polymerization**May Occur:****Will Not Occur: X****Conditions To Avoid**

See above

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry**Inhalation?** yes**Skin?** yes**Ingestion?** yes**Health Hazards (Acute and Chronic)**

Aluminum dusts are eye and mucous membrane irritants. Prolonged exposure to airborne particulate may cause acute irritation of the nose and trachea resulting in a metallic taste or nasal ulceration. Ingestion of aluminum is not considered toxic.

Carcinogenicity**NTP?** no**IARC Monographs?** no**OSHA Regulated?** no**Signs And Symptoms of Exposure**

n/a

Medical Conditions Generally Aggravated by Exposure

No observable effects on humans have yet been established as a result of chronic exposure to aluminum flake.

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes. If irritation persists, seek medical attention. Contact lenses should not be worn.

Skin contact: Wash with soap and water. Get medical attention if irritation occurs/persists.

Inhalation: Move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.

Ingestion: If swallowed, drink one or two glasses of water. DO NOT induce vomiting. Get medical attention.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Sweep gently to avoid dust cloud formation. Use non-sparking tools. Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

DO NOT attempt to store finished mixtures of water-based mediums and aluminum pigments or metallic pigments that contain aluminum flake as part of their blend.

Other Precautions

Keep out of reach of children.

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

Use a NIOSH approved dust respirator if air monitoring demonstrates that airborne particulate exceeds recommended threshold limits.

Ventilation**Local Exhaust**

Ventilation sufficient in volume and pattern should be provided to keep air quality within approved OSHA levels.

Special

Use respirator

Mechanical (General)

Recommended when spraying

Other**Protective Gloves**

Yes

Eye Protection

Yes, splash goggles

Other Protective Clothing Or Equipment

Eye wash and safety shower are recommended if using this product in large concentrations..

Work/Hygienic Practices

Wear protective clothing that is removed before eating, drinking, smoking, or leaving work. Wash thoroughly when finished using this product.

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

"Products bearing the Caution Label are certified to be properly labeled in a program of toxicological evaluation by a nationally recognized toxicologist. The products are certified by the toxicologist to be labeled in accordance with the chronic hazard labeling standard ASTM D-4236."

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MATERIAL SAFETY DATA SHEET

Identity

Liquid Masking Tape EN 109; KN 109

MSDS # 609

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

Health 2 Reactivity 0
Fire 0 Protective Equip. G
(if spraying)

SECTION I

Emergency Telephone Number
(209) 291-4444
Telephone Number
(209) 291-4444
Date Prepared Revised
September 1996 March 1, 1999
Prepared By
Frank Peters

Hazardous Components

Ammonia

Other Information

OSHA PEL
50 ppm

ACGIH TLV
25 ppm

CAS #
7664-41-7

%

Boiling Point, (DEG°F)
212°F

Melting Point, (DEG°F)
n/a

Specific Gravity (Water=1):
0.96

Appearance And Odor
Cream colored liqued with slight ammonia odor

pH
9.5 - 10.0

Vapor Pressure, (MM HG.)
n/a

Vapor Density (AIR=1)
n/a

Water Solubility, %
n/a

Freezing Point
n/a

Evaporation Rate (Butyl Acetate=1)
1

SECTION III PHYSICAL DATA

Flash Point (Method Used)
n/a

Extinguishing Media
Water, carbon dioxide, or dry chemical for dried film.

Special Fire Fighting Procedures
Wear self-contained breathing apparatus approved by NIOSH. Use water spray to keep containers cool, keep spillage away from fire and heat, and to knock down vapors.

Unusual Fire And Explosion Hazards
Burning dry latex produces dense, black smoke with the potential for toxic vapors.

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flammable Limits
LEL n/a UEL n/a

Stability

Conditions To Avoid
Avoid temperature extremes

Incompatibility (Materials To Avoid)
Solvents, acids, metal salts, and other compounds which may coagulate latex.

Hazardous Decomposition or Byproducts
Thermal decomposition may produce toxic gases.

Hazardous Polymerization
Conditions To Avoid
n/a

SECTION V REACTIVITY DATA

Unstable: Stable: X

May Occur: Will Not Occur: X

SECTION VI
HEALTH HAZARD DATA

| | | | |
|---|--|----------------------------|---------------------------|
| Routes Of Entry | Inhalation? yes | Skin? no | Ingestion? yes |
| Health Hazards (Acute and Chronic) | | | |
| Ammonia causes reversible eye and throat irritation and respiratory distress. | | | |
| Carcinogenicity | NTP? no | IARC Monographs? no | OSHA Regulated? no |
| Signs And Symptoms of Exposure | | | |
| n/a | | | |
| Medical Conditions Generally Aggravated by Exposure | | | |
| n/a | | | |
| Emergency And First Aid Procedures | | | |
| Eye contact: | Flush with water at least 15 minutes. If irritation persists, contact a physician. | | |
| Skin contact: | Wash with soap and water. Contact a physician. | | |
| Inhalation: | Move the exposed person to fresh air. | | |

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Confine spill to prevent contamination of sewer system or ground water. Absorb liquid onto an appropriate absorbent. Spillage will cause slippery conditions.

Waste Disposal Method

Follow Federal, State, and Local regulations for disposal.

Precautions To Be Taken In Handling And Storing

Avoid temperature extremes. Keep from freezing. When using, do not eat, drink, or smoke. Wash hands immediately after use. Keep sealed.

Keep out of reach of children.

Other Precautions

None

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

When permissible exposure limits (PEL) are exceeded, use mask supplied with external air or other NIOSH approved respiratory protection.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Recommended when spraying

Protective Gloves

Yes, vinyl or rubber

Other Protective Clothing Or Equipment

Safety shower and eye wash stations.

Work/Hygienic Practices

Use good work hygiene practices.

Special

Use respirator when spraying

Other**Eye Protection**

yes

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



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MATERIAL SAFETY DATA SHEET

Identity MSDS # 701

Craft and Fabric Paint: AM 400 Series; AO Series; AY 406; Matte BI 15000 Series; BG 300 & 500 Series; CA 200 Series; CHP 17000 Series; CG 100 Series; CU 100 Series; EN 113; EN 114; EN 16494; EN16923; EN16933; FLG 1-13; FLGL 1-4; FLGS 1-8; FLMT 1-10; FLIP 1-46; FLP1-4; FLP4-4; FLS 1-56; FLSP 1-14; FLSS 1-4; FS 100, 200, 300 & 700 Series; GW 200 & 300 Series; Gizmo Swirl Gel 31038; KN 113; KN 114; MD 80500 Series; PM 100, 200, 300, 500 & 600 Series; SC-3D 100, 200, 300 and 500 Series; SF 100 Series; SP 201 & 202; SP 240-242; SP 301-303; SP 401; SP 402; SP404; SP 405; SP 406; SP 407; SP 408; SP 410; SP 501; SP 502; SP 504; SP 505; SP 506; Slick 65000 to 65042; Pearl 65043 to 65080; Glitter 65082 to 65120; Crystals 65091 to 65100; Snow 65173; Glow 65174 to 65177; Matte 65300; Puffy 65101 to 65108; Metallics 65400 to 65409; Gellies 65410 to 65417; TL 474; WO 15400 to 15500 Series

SECTION I

Manufacturer's Name

Duncan Enterprises

Address

5673 E. Shields Ave.
Fresno, CA 93727

HMIS Codes

| | |
|----------|--------------------------------------|
| Health 0 | Reactivity 0 |
| Fire 0 | Protective Equip. G (if spraying) |

Emergency Telephone Number

(559) 291-4444

Telephone Number

(559) 291-4444

Date Prepared

August 1987

Revised

May 2002

Prepared By

Frank Peters

SECTION II

HAZARDOUS INGREDIENTS

Hazardous Components

None

Other Information

None

OSHA PEL

ACGIH TLV

CAS #

%

SECTION III

PHYSICAL DATA

Boiling Point, (DEG°F)

212°F

Vapor Pressure, (MM HG.)

n/a

Melting Point, (DEG°F)

n/a

Vapor Density (AIR=1)

n/a

Specific Gravity (Water=1):

1.1

Water Solubility, %

Insoluble

Appearance And Odor

Opaque-colored latex paint

Freezing Point

32°F

pH

7.0 - 9.0

Evaporation Rate (Butyl Acetate=1)

Less than 1 water

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)

n/a

Flammable Limits

LEL n/a

UEL n/a

Extinguishing Media

Use appropriate techniques and media for surrounding fire.

Special Fire Fighting Procedures

None.

Unusual Fire And Explosion Hazards

Material can spatter above 212°F.

Polymer film can burn.

SECTION V

REACTIVITY DATA

Stability

Unstable:

Stable: X

Conditions To Avoid

n/a

Incompatibility (Materials To Avoid)

n/a

Hazardous Decomposition or Byproducts

n/a

Hazardous Polymerization

May Occur:

Will Not Occur: X

Conditions To Avoid

n/a

SECTION VI
HEALTH HAZARD DATA

Routes Of Entry

Inhalation? no

Skin? no

Ingestion? yes

Health Hazards (Acute and Chronic)

None. Nontoxic

Carcinogenicity

NTP? no

IARC Monographs? no

OSHA Regulated? no

Signs And Symptoms of Exposure

n/a

Medical Conditions Generally Aggravated by Exposure

Abrasive, can scratch eyes.

Emergency And First Aid Procedures

Eye contact: Flush with water at least 15 minutes.

Skin contact: Wash with soap and water.

SECTION VII
PRECAUTIONS FOR SAFE HANDLING

Steps To Be Taken In Case Material Is Released Or Spilled

Clean up properly with paper towels and a wet sponge.

Waste Disposal Method

Put paper towels in trash and rinse out sponge.

Precautions To Be Taken In Handling And Storing

Keep container sealed.

Other Precautions

n/a

SECTION VIII
CONTROL MEASURES

Respiratory Protection (Specify Type)

If spraying, do not inhale mist. Use respirator that is NIOSH approved for sprays and mists.

Ventilation**Local Exhaust**

Recommended

Mechanical (General)

Recommended when spraying

Protective Gloves

no

Other Protective Clothing Or Equipment

None needed

Work/Hygienic Practices

Good hygiene practices should be followed.

Special

Use respirator when spraying

Other

None

Eye Protection

yes

SECTION IX
ADDITIONAL INFORMATION

CALIFORNIA Proposition 65

n/a



"Products bearing the Nontoxic Product Seal are certified in a program of toxicological evaluation by a nationally recognized toxicologist to contain no materials in sufficient quantities to be toxic or injurious to humans or to cause acute or chronic health problems. These products are certified to be labeled in accordance with the voluntary chronic hazard labeling standard ASTM D-4236. In addition, there is no physical hazard as defined within 29 CFR Part 1910.1200(c)."

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