

Revision Date: 8/2/2016

Rust-Oleum Multi Component Product Information Sheet

279617 AUTORF PRPK 12PK GLASS MARKERS MULTI CLR is a multi component product composed of the following individual chemical components:

267963	AUTORF 4PK MRK RO GLASS MARKERS WHITE
267964	AUTORF 4PK MRK RO GLASS MARKERS RED
267965	AUTORF 4PK MRK RO GLASS MARKERS BLUE
267966	AUTORF 4PK MRK RO GLASS MARKERS YELLOW
267967	AUTORF 4PK MRK RO GLASS MARKERS GREEN
267868	AUTORF 4PK MRK RO GLASS MARKERS BLACK

SDSs for each component follow this cover sheet.

Transportation Information

UN Number:	Domestic (USDOT) N.A.	International (IMDG) N.A.	<u>Air (IATA)</u> N.A.	TDG (Canada) N.A.
Proper Shipping Name:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Hazard Class:	N.A.	N.A.	N.A.	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	No	No	No	No

Finished Good Schedule B Harmonized Tariff Code 3209.10.0000

Date Printed: 8/2/2016 Page 1 / 5

Safety Data Sheet



1. Identification

AUTORF 4PK MRK RO GLASS MARKERS **Product Name:**

WHITE

Product Identifier: 267963

Product Use/Class: Glass Marker/Waterbased

Supplier:

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Preparer: Regulatory Department

24 Hour Hotline: 847-367-7700 **Emergency Telephone:**

www.rustoleum.com

Revision Date:

Supercedes Date:

Rust-Oleum Corporation Rust-Oleum Corporation Manufacturer:

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

8/2/2016

12/7/2015

2. Hazard Identification

Classification

Symbol(s) of Product

Not a hazardous substance or mixture.

Signal Word

No Signal Word has been assigned.

Possible Hazards

21% of the mixture consists of ingredient(s) of unknown acute toxicity.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

Chemical Name	CAS-No.	Wt.% Range	GHS Symbols	GHS Statements
Titanium Dioxide	13463-67-7	10-25	Not Available	Not Available
Calcium Carbonate	471-34-1	10-25	Not Available	Not Available
Talc (Hydrous Magnesium Silicate)	14807-96-6	2.5-10	Not Available	Not Available

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

Date Printed: 8/2/2016 Page 2 / 5

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention. If swallowed, rinse mouth with water. If feeling unwell, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep from freezing. Keep container closed when not in use. Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Titanium Dioxide	13463-67-7	25.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Calcium Carbonate	471-34-1	20.0	N.E.	N.E.	N.E.	N.E.
Talc (Hydrous Magnesium Silicate)	14807-96-6	10.0	2 mg/m3	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Not required under conditions of normal usage. **RESPIRATORY PROTECTION:** Not required under conditions of normal usage.

SKIN PROTECTION: Not required under conditions of normal usage. **EYE PROTECTION:** Not required under conditions of normal usage.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Date Printed: 8/2/2016 Page 3 / 5

9. Physical and Chemical Properties

Appearance: **Physical State:** Liquid Liquid Odor: **Odor Threshold:** Mild N.E. **Relative Density:** 1.295 pH: N.D. Freeze Point, °C: Viscosity: 32 N.D. Partition Coefficient, n-octanol/ Solubility in Water: Miscible N.D. water: Decompostion Temp., °C: N.D. Boiling Range, °C: Explosive Limits, vol%: N.A. - N.A. -18 - 3,000 Flash Point, °C: Flammability: **Does not Support Combustion** 94 **Evaporation Rate:** Auto-ignition Temp., °C: Slower than Ether N.D. Vapor Density: Heavier than Air Vapor Pressure: N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010)

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.I.
471-34-1	Calcium Carbonate	6450 mg/kg Rat	N.I.	N.I.
14807-96-6	Talc (Hydrous Magnesium Silicate)	6000	N.I.	30

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

Date Printed: 8/2/2016 Page 4 / 5

14. Transport Information

Domestic (USDOT) International (IMDG) Air (IATA) TDG (Canada)
UN Number: N.A. N.A. N.A. N.A. N.A.

Proper Shipping Name: Not Regulated Not Regulated Not Regulated Not Regulated

Hazard Class:N.A.N.A.N.A.N.A.Packing Group:N.A.N.A.N.A.N.A.Limited Quantity:NoNoNoNo

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

None Known

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

HMIS RATINGS

Health: 1 Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 1 Flammability: 1 Instability 0

VOLATILE ORGANIC COMPOUNDS, g/L: 6

SDS REVISION DATE: 8/2/2016

REASON FOR REVISION: Regulatory Formula Source Changed

Product Composition Changed

Substance and/or Product Properties Changed in Section(s):

02 - Hazard Identification

09 - Physical & Chemical Properties 11 - Toxicological Information

Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Date Printed: 8/2/2016 Page 5 / 5

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Page 1 / 5 Date Printed: 8/2/2016

Safety Data Sheet



www.rustoleum.com

1. Identification

AUTORF 4PK MRK RO GLASS MARKERS **Product Name:**

RED

Product Identifier: 267964

Product Use/Class: Glass Marker/Waterbased

Rust-Oleum Corporation Supplier:

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Preparer: Regulatory Department

24 Hour Hotline: 847-367-7700 **Emergency Telephone:**

* Trusted Quality Since 1921 *

Supercedes Date: 12/7/2015

Manufacturer:

Revision Date:

Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061

USA

8/2/2016

2. Hazard Identification

Classification

Symbol(s) of Product

Not a hazardous substance or mixture.

Signal Word

No Signal Word has been assigned.

Possible Hazards

24% of the mixture consists of ingredient(s) of unknown acute toxicity.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	CAS-No.	Wt.% Range	GHS Symbols	GHS Statements
Calcium Carbonate	471-34-1	10-25	Not Available	Not Available
Talc (Hydrous Magnesium Silicate)	14807-96-6	2.5-10	Not Available	Not Available

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

Date Printed: 8/2/2016 Page 2 / 5

FIRST AID - INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention. If swallowed, rinse mouth with water. If feeling unwell, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep from freezing. Keep container closed when not in use. Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Calcium Carbonate	471-34-1	20.0	N.E.	N.E.	N.E.	N.E.
Talc (Hydrous Magnesium Silicate)	14807-96-6	10.0	2 mg/m3	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Not required under conditions of normal usage. **RESPIRATORY PROTECTION:** Not required under conditions of normal usage.

SKIN PROTECTION: Not required under conditions of normal usage. **EYE PROTECTION:** Not required under conditions of normal usage.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Date Printed: 8/2/2016 Page 3 / 5

9. Physical and Chemical Properties

Appearance: **Physical State:** Liquid Liquid Odor: **Odor Threshold:** Mild N.E. **Relative Density:** 1.295 pH: N.D. Freeze Point, °C: Viscosity: 32 N.D. Solubility in Water: Miscible Partition Coefficient, n-octanol/ N.D. water: Decompostion Temp., °C: N.D.

Boiling Range, °C: -18 - 825 Explosive Limits, vol%: N.A. - N.A.

Flammability:Does not Support CombustionFlash Point, °C:94Evaporation Rate:Slower than EtherAuto-ignition Temp., °C:N.D.Vapor Density:Heavier than AirVapor Pressure:N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	<u>Oral LD50</u>	Dermal LD50	Vapor LC50
471-34-1	Calcium Carbonate	6450 mg/kg Rat	N.I.	N.I.
14807-96-6	Talc (Hydrous Magnesium Silicate)	6000	N.I.	30

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

Date Printed: 8/2/2016 Page 4 / 5

14. Transport Information

Domestic (USDOT) International (IMDG) Air (IATA) TDG (Canada)
UN Number: N.A. N.A. N.A. N.A. N.A.

Proper Shipping Name: Not Regulated Not Regulated Not Regulated Not Regulated

Hazard Class:N.A.N.A.N.A.N.A.Packing Group:N.A.N.A.N.A.N.A.Limited Quantity:NoNoNoNo

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

None Known

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

HMIS RATINGS

Health: 1 Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 1 Flammability: 1 Instability 0

VOLATILE ORGANIC COMPOUNDS, g/L: 6

SDS REVISION DATE: 8/2/2016

REASON FOR REVISION: Regulatory Formula Source Changed

Product Composition Changed

Substance and/or Product Properties Changed in Section(s):

02 - Hazard Identification

09 - Physical & Chemical Properties 11 - Toxicological Information

Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Date Printed: 8/2/2016 Page 5 / 5

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Date Printed: 8/2/2016 Page 1 / 5

Safety Data Sheet



1. Identification

AUTORF 4PK MRK RO GLASS MARKERS **Product Name:**

BLUE

Product Identifier: 267965

Product Use/Class: Glass Marker/Waterbased

Rust-Oleum Corporation Supplier:

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Preparer: Regulatory Department

24 Hour Hotline: 847-367-7700 **Emergency Telephone:**

www.rustoleum.com

8/2/2016

12/7/2015

USA

Rust-Oleum Corporation

11 Hawthorn Parkway

Vernon Hills, IL 60061

Revision Date:

Manufacturer:

Supercedes Date:

2. Hazard Identification

Classification

Symbol(s) of Product

Not a hazardous substance or mixture.

Signal Word

No Signal Word has been assigned.

Possible Hazards

21% of the mixture consists of ingredient(s) of unknown acute toxicity.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	CAS-No.	Wt.% Range	GHS Symbols	GHS Statements
Titanium Dioxide	13463-67-7	10-25	Not Available	Not Available
Calcium Carbonate	471-34-1	10-25	Not Available	Not Available
Talc (Hydrous Magnesium Silicate)	14807-96-6	2.5-10	Not Available	Not Available

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

Date Printed: 8/2/2016 Page 2 / 5

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention. If swallowed, rinse mouth with water. If feeling unwell, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing. **STORAGE:** Keep from freezing. Keep container closed when not in use. Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Titanium Dioxide	13463-67-7	20.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Calcium Carbonate	471-34-1	20.0	N.E.	N.E.	N.E.	N.E.
Talc (Hydrous Magnesium Silicate)	14807-96-6	10.0	2 mg/m3	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Not required under conditions of normal usage. **RESPIRATORY PROTECTION:** Not required under conditions of normal usage.

SKIN PROTECTION: Not required under conditions of normal usage. **EYE PROTECTION:** Not required under conditions of normal usage.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Date Printed: 8/2/2016 Page 3 / 5

9. Physical and Chemical Properties

Appearance: **Physical State:** Liquid Liquid Odor: **Odor Threshold:** Mild N.E. **Relative Density:** 1.295 pH: N.D. Freeze Point, °C: Viscosity: 32 N.D. Partition Coefficient, n-octanol/ Solubility in Water: Miscible N.D. water: Decompostion Temp., °C: N.D. Boiling Range, °C: Explosive Limits, vol%: N.A. - N.A. -18 - 3,000 Flash Point, °C: Flammability: **Does not Support Combustion** 94 **Evaporation Rate:** Auto-ignition Temp., °C: Slower than Ether N.D. Vapor Density: Heavier than Air Vapor Pressure: N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010)

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.I.
471-34-1	Calcium Carbonate	6450 mg/kg Rat	N.I.	N.I.
14807-96-6	Talc (Hydrous Magnesium Silicate)	6000	N.I.	30

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

Date Printed: 8/2/2016 Page 4 / 5

14. Transport Information

Domestic (USDOT) International (IMDG) Air (IATA) TDG (Canada)
UN Number: N.A. N.A. N.A. N.A. N.A.

Proper Shipping Name: Not Regulated Not Regulated Not Regulated Not Regulated

Hazard Class:N.A.N.A.N.A.N.A.Packing Group:N.A.N.A.N.A.N.A.Limited Quantity:NoNoNoNo

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

None Known

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

HMIS RATINGS

Health: 1 Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 1 Flammability: 1 Instability 0

VOLATILE ORGANIC COMPOUNDS, g/L: 6

SDS REVISION DATE: 8/2/2016

REASON FOR REVISION: Regulatory Formula Source Changed

Product Composition Changed

Substance and/or Product Properties Changed in Section(s):

02 - Hazard Identification

09 - Physical & Chemical Properties 11 - Toxicological Information

Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Date Printed: 8/2/2016 Page 5 / 5

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Date Printed: 8/2/2016 Page 1 / 5

Safety Data Sheet



www.rustoleum.com

Revision Date:

1. Identification

Product Name: AUTORF 4PK MRK RO GLASS MARKERS

YELLOW

Product Identifier: 267966 Supercedes Date: 12/7/2015

Product Use/Class: Glass Marker/Waterbased

Supplier: Rust-Oleum Corporation Manufacturer: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

8/2/2016

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Preparer: Regulatory Department

Emergency Telephone: 24 Hour Hotline: 847-367-7700

2. Hazard Identification

Classification

Symbol(s) of Product

Not a hazardous substance or mixture.

Signal Word

No Signal Word has been assigned.

Possible Hazards

23% of the mixture consists of ingredient(s) of unknown acute toxicity.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	CAS-No.	<u>Wt.%</u> Range	GHS Symbols	GHS Statements
Calcium Carbonate	471-34-1	10-25	Not Available	Not Available
Titanium Dioxide	13463-67-7	2.5-10	Not Available	Not Available
Talc (Hydrous Magnesium Silicate)	14807-96-6	2.5-10	Not Available	Not Available

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

Date Printed: 8/2/2016 Page 2 / 5

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention. If swallowed, rinse mouth with water. If feeling unwell, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep from freezing. Keep container closed when not in use. Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Calcium Carbonate	471-34-1	20.0	N.E.	N.E.	N.E.	N.E.
Titanium Dioxide	13463-67-7	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Talc (Hydrous Magnesium Silicate)	14807-96-6	10.0	2 mg/m3	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Not required under conditions of normal usage. **RESPIRATORY PROTECTION:** Not required under conditions of normal usage.

SKIN PROTECTION: Not required under conditions of normal usage. **EYE PROTECTION:** Not required under conditions of normal usage.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Date Printed: 8/2/2016 Page 3 / 5

9. Physical and Chemical Properties

Appearance: **Physical State:** Liquid Liquid Odor: **Odor Threshold:** Mild N.E. **Relative Density:** 1.295 pH: N.D. Freeze Point, °C: Viscosity: 32 N.D. Partition Coefficient, n-octanol/ Solubility in Water: Miscible N.D. water: Decompostion Temp., °C: N.D. Boiling Range, °C: Explosive Limits, vol%: N.A. - N.A. -18 - 3,000 Flash Point, °C: Flammability: **Does not Support Combustion** 94 **Evaporation Rate:** Auto-ignition Temp., °C: Slower than Ether N.D. Vapor Density: Heavier than Air Vapor Pressure: N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010)

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
471-34-1	Calcium Carbonate	6450 mg/kg Rat	N.I.	N.I.
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.I.
14807-96-6	Talc (Hydrous Magnesium Silicate)	6000	N.I.	30

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

Date Printed: 8/2/2016 Page 4 / 5

14. Transport Information

Domestic (USDOT) International (IMDG) Air (IATA) TDG (Canada)
UN Number: N.A. N.A. N.A. N.A. N.A.

Proper Shipping Name: Not Regulated Not Regulated Not Regulated Not Regulated

Hazard Class:N.A.N.A.N.A.N.A.Packing Group:N.A.N.A.N.A.N.A.Limited Quantity:NoNoNoNo

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

None Known

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

HMIS RATINGS

Health: 1 Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 1 Flammability: 1 Instability 0

VOLATILE ORGANIC COMPOUNDS, g/L: 6

SDS REVISION DATE: 8/2/2016

REASON FOR REVISION: Regulatory Formula Source Changed

Product Composition Changed

Substance and/or Product Properties Changed in Section(s):

02 - Hazard Identification

09 - Physical & Chemical Properties 11 - Toxicological Information

Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Date Printed: 8/2/2016 Page 5 / 5

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Date Printed: 8/2/2016 Page 1 / 5

Safety Data Sheet



www.rustoleum.com

1. Identification

Product Name: AUTORF 4PK MRK RO GLASS MARKERS

GREEN

Revision Date:

Manufacturer:

8/2/2016

Product Identifier: 267967

Supercedes Date:

12/7/2015

Product Use/Class:

Glass Marker/Waterbased

Supplier:

Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061

Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061

USA

USA

Preparer:

Regulatory Department

Emergency Telephone:

24 Hour Hotline: 847-367-7700

2. Hazard Identification

Classification

Symbol(s) of Product

Not a hazardous substance or mixture.

Signal Word

No Signal Word has been assigned.

Possible Hazards

22% of the mixture consists of ingredient(s) of unknown acute toxicity.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	CAS-No.	<u>Wt.%</u> Range	GHS Symbols	GHS Statements
Calcium Carbonate	471-34-1	10-25	Not Available	Not Available
Titanium Dioxide	13463-67-7	2.5-10	Not Available	Not Available
Talc (Hydrous Magnesium Silicate)	14807-96-6	2.5-10	Not Available	Not Available

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

Date Printed: 8/2/2016 Page 2 / 5

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention. If swallowed, rinse mouth with water. If feeling unwell, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep from freezing. Keep container closed when not in use. Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Calcium Carbonate	471-34-1	20.0	N.E.	N.E.	N.E.	N.E.
Titanium Dioxide	13463-67-7	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Talc (Hydrous Magnesium Silicate)	14807-96-6	10.0	2 mg/m3	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Not required under conditions of normal usage. **RESPIRATORY PROTECTION:** Not required under conditions of normal usage.

SKIN PROTECTION: Not required under conditions of normal usage. **EYE PROTECTION:** Not required under conditions of normal usage.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Date Printed: 8/2/2016 Page 3 / 5

9. Physical and Chemical Properties

Appearance: **Physical State:** Liquid Liquid Odor: **Odor Threshold:** Mild N.E. **Relative Density:** 1.295 pH: N.D. Freeze Point, °C: Viscosity: 32 N.D. Partition Coefficient, n-octanol/ Solubility in Water: Miscible N.D. water: Decompostion Temp., °C: N.D. Boiling Range, °C: Explosive Limits, vol%: N.A. - N.A. -18 - 3,000 Flash Point, °C: Flammability: **Does not Support Combustion** 94 **Evaporation Rate:** Auto-ignition Temp., °C: Slower than Ether N.D. Vapor Density: Heavier than Air Vapor Pressure: N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010)

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
471-34-1	Calcium Carbonate	6450 mg/kg Rat	N.I.	N.I.
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.I.
14807-96-6	Talc (Hydrous Magnesium Silicate)	6000	N.I.	30

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

Date Printed: 8/2/2016 Page 4 / 5

14. Transport Information

Domestic (USDOT) International (IMDG) Air (IATA) TDG (Canada)
UN Number: N.A. N.A. N.A. N.A. N.A.

Proper Shipping Name: Not Regulated Not Regulated Not Regulated Not Regulated

Hazard Class:N.A.N.A.N.A.N.A.Packing Group:N.A.N.A.N.A.N.A.Limited Quantity:NoNoNoNo

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

None Known

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

HMIS RATINGS

Health: 1 Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 1 Flammability: 1 Instability 0

VOLATILE ORGANIC COMPOUNDS, g/L: 6

SDS REVISION DATE: 8/2/2016

REASON FOR REVISION: Regulatory Formula Source Changed

Product Composition Changed

Substance and/or Product Properties Changed in Section(s):

02 - Hazard Identification

09 - Physical & Chemical Properties 11 - Toxicological Information

Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Date Printed: 8/2/2016 Page 5 / 5

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Date Printed: 8/2/2016 Page 1 / 5

Safety Data Sheet



1. Identification

AUTORF 4PK MRK RO GLASS MARKERS **Product Name:**

BLACK

Product Identifier: 267868

Product Use/Class: Glass Marker/Waterbased

Rust-Oleum Corporation Supplier:

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Preparer: Regulatory Department

24 Hour Hotline: 847-367-7700 **Emergency Telephone:**

www.rustoleum.com

Revision Date: 8/2/2016

Supercedes Date: 12/7/2015

Rust-Oleum Corporation Manufacturer:

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

2. Hazard Identification

Classification

Symbol(s) of Product

Not a hazardous substance or mixture.

Signal Word

No Signal Word has been assigned.

Possible Hazards

34% of the mixture consists of ingredient(s) of unknown acute toxicity.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	CAS-No.	Wt.% Range	GHS Symbols	GHS Statements
Calcium Carbonate	471-34-1	25-50	Not Available	Not Available
Talc (Hydrous Magnesium Silicate)	14807-96-6	2.5-10	Not Available	Not Available
Carbon Black	1333-86-4	2.5-10	Not Available	Not Available

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

Date Printed: 8/2/2016 Page 2 / 5

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention. If swallowed, rinse mouth with water. If feeling unwell, get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted. Keep containers tightly closed.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep from freezing. Keep container closed when not in use. Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Calcium Carbonate	471-34-1	30.0	N.E.	N.E.	N.E.	N.E.
Talc (Hydrous Magnesium Silicate)	14807-96-6	10.0	2 mg/m3	N.E.	N.E.	N.E.
Carbon Black	1333-86-4	5.0	3 mg/m3	N.E.	3.5 mg/m3	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Not required under conditions of normal usage. **RESPIRATORY PROTECTION:** Not required under conditions of normal usage.

SKIN PROTECTION: Not required under conditions of normal usage. **EYE PROTECTION:** Not required under conditions of normal usage.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Date Printed: 8/2/2016 Page 3 / 5

9. Physical and Chemical Properties

Appearance: **Physical State:** Liquid Liquid Odor: **Odor Threshold:** Mild N.E. **Relative Density:** 1.295 pH: N.D. Freeze Point, °C: Viscosity: 32 N.D. Solubility in Water: Miscible Partition Coefficient, n-octanol/ N.D. water: Decompostion Temp., °C: N.D. Explosive Limits, vol%: Boiling Range, °C: -18 - 825 N.A. - N.A. Flash Point, °C: Flammability: **Does not Support Combustion** 94 Auto-ignition Temp., °C: **Evaporation Rate:** Slower than Ether N.D. Vapor Density: Heavier than Air Vapor Pressure: N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	<u>Oral LD50</u>	Dermal LD50	Vapor LC50
471-34-1	Calcium Carbonate	6450 mg/kg Rat	N.I.	N.I.
14807-96-6	Talc (Hydrous Magnesium Silicate)	6000	N.I.	30
1333-86-4	Carbon Black	>15400 mg/kg Rat	N.I.	N.I.

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

Date Printed: 8/2/2016 Page 4 / 5

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

•				
	Domestic (USDOT)	International (IMDG)	<u>Air (IATA)</u>	TDG (Canada)
UN Number:	N.A.	N.A.	N.A.	N.A.
Proper Shipping Name:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Hazard Class:	N.A.	N.A.	N.A.	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	No	No	No	No

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

Date Printed: 8/2/2016 Page 5 / 5

16. Other Information

HMIS RATINGS

Health: 1 Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 1 Flammability: 1 Instability 0

VOLATILE ORGANIC COMPOUNDS, g/L: 6

SDS REVISION DATE: 8/2/2016

REASON FOR REVISION: Regulatory Formula Source Changed

Product Composition Changed

Substance and/or Product Properties Changed in Section(s):

02 - Hazard Identification

09 - Physical & Chemical Properties 11 - Toxicological Information 15 - Regulatory Information Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.