

Revision Date: 8/1/2018

Rust-Oleum Multi Component Product Information Sheet

299760 ROHPER 1-GL ORGANIC ZINC PRIMER PRPK is a multi component product composed of the following individual chemical components:

303977 ROHPER 1-GL ORGANIC PART A, 1-GAL KIT
303978 ROHPER 1-GL ORGANIC PART B, 1-GAL KIT
303979 ROHPER 1-GL ZINC DUST FOR GALLON KITS

SDSs for each component follow this cover sheet.

Transportation Information

	Domestic (USDOT)	International (IMDG)	Air (IATA)	TDG (Canada)
UN Number:	N.A.	1263	1263	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Paint	Paint	Paint Products in Limited Quantities
Hazard Class:	N.A.	3	3	N.A.
Packing Group:	N.A.	II	II	N.A.
Limited Quantity:	Yes	Yes	Cargo Aircraft Only	Yes

Finished Good Schedule B Harmonized Tariff Code 3208.90.0000

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Safety Data Sheet



1. Identification

Product Name: ROHPER 1-GL ORGANIC PART A, 1-GAL

KIT

Product Identifier: 303977

Recommended Use: Multicomponent industrial coating /

Solventborne

Supplier: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Rust-Oleum Canada (ROCA) 200 Confederation Parkway Concord, ON L4K 4T8

Canada

Emergency Phone: 800-387-3625

Preparer: Regulatory Department

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

Revision Date: 8/1/2018

Supercedes Date: 8/1/2018

Manufacturer: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

2. Hazard Identification

Classification

Symbol(s) of Product







Signal Word

Danger

Possible Hazards

11% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS HAZARD STATEMENTS

Flammable Liquid, category 2 H225 Highly flammable liquid and vapour.

Carcinogenicity, category 2 H351 Suspected of causing cancer.

Reproductive Toxicity, category 1A H360 May damage fertility or the unborn child.

STOT, single exposure, category 3, NE H336 May cause drowsiness or dizziness.

STOT, repeated exposure, category 2 H373 May cause damage to organs through prolonged or repeated exposure.

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Skin Irritation, category 2 H315 Causes skin irritation.

Eye Irritation, category 2 H319 Causes serious eye irritation.

Skin Sensitizer, category 1 H317 May cause an allergic skin reaction.

GHS LABEL PRECAUTIONARY STATEMENTS

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/

shower.

P370+P378 In case of fire: Use alcohol film forming foam, carbon dioxide, dry chemical, dry sand to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local, regional and national regulations.

P201 Obtain special instructions before use.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P271 Use only outdoors or in a well-ventilated area.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P321 For specific treatment see label

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P272 Contaminated work clothing should not be allowed out of the workplace.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

GHS SDS PRECAUTIONARY STATEMENTS

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P363 Wash contaminated clothing before reuse.

3. Composition / Information On Ingredients

Chemical Name	CAS-No.	<u>Wt.%</u>	GHS Symbols	GHS Statements
Toluene	108-88-3	18	GHS02-GHS07- GHS08	H225-304-315-332-336-361-373
Epichlorohydrin-bisphenol A resin	25068-38-6	5.2	GHS07	H315-317-319-335
Methyl Ethyl Ketone	78-93-3	4.9	GHS02-GHS07	H225-319-332-336
n-Butanol	71-36-3	1.5	GHS02-GHS05- GHS07	H226-302-315-318-332-335-336
Polystyrene	9003-53-6	1.5	GHS08	H360
meta-Xylene	108-38-3	1.5	GHS02-GHS07	H226-315-332
Urea, polymer with formaldehyde, butylated	68002-19-7	1.5	Not Available	Not Available
Titanium Dioxide	13463-67-7	1.2	Not Available	Not Available
Ethylbenzene	100-41-4	0.4	GHS02-GHS07- GHS08	H225-304-332-351-373
Carbon Black	1333-86-4	0.4	Not Available	Not Available

4. First-Aid Measures

HAZARDOUS SUBSTANCES

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.

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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: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, 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: No unusual fire or explosion hazards noted. Closed containers may explode when exposed to extreme heat due to buildup of steam. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Special Fire and Explosion Hazard (Combustible Dust): No Information

Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and 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: Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials. Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids.

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

	1	1		1		
Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Toluene	108-88-3	20.0	20 ppm	N.E.	200 ppm	300 ppm
Epichlorohydrin-bisphenol A resin	25068-38-6	10.0	N.E.	N.E.	N.E.	N.E.
Methyl Ethyl Ketone	78-93-3	5.0	200 ppm	300 ppm	200 ppm	N.E.
meta-Xylene	108-38-3	5.0	100 ppm	150 ppm	N.E.	N.E.
Polystyrene	9003-53-6	5.0	N.E.	N.E.	N.E.	N.E.
n-Butanol	71-36-3	5.0	20 ppm	N.E.	100 ppm	N.E.
Urea, polymer with formaldehyde, butylated	68002-19-7	5.0	N.E.	N.E.	N.E.	N.E.
Titanium Dioxide	13463-67-7	5.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	N.E.	100 ppm	N.E.
Carbon Black	1333-86-4	1.0	3 mg/m3	N.E.	3.5 mg/m3	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve crossventilation.

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RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

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.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Physical State: Appearance: Liquid Liquid Odor: Odor Threshold: Solvent Like N.E. **Relative Density:** pH: 1.300 N.A. Freeze Point, °C: Viscosity: N.D. N.D. Solubility in Water: Slight Partition Coefficient, n-octanol/ N.D. water: Decompostion Temp., °C: N.D. Boiling Range, °C: 78 - 3.000 Explosive Limits, vol%: 1.1 - 11.5 Flammability: Supports Combustion Flash Point, °C: 9 **Evaporation Rate:** Auto-ignition Temp., °C: N.D. Slower than Ether Vapor Density: Vapor Pressure: Heavier than Air N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

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. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

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 Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May be absorbed through the skin in harmful amounts. Causes skin irritation. Allergic reactions are possible.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure to methyl ethyl ketone in laboratory animals has been associated with liver abnormalities, kidney and lung damage. Fetotoxic/embryotoxic effects from inhalation have been seen in rats exposed to >1000ppm during gestation. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). 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) 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

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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. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, 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
108-88-3	Toluene	2600 mg/kg Rat	12000 mg/kg Rabbit	12.5 mg/L Rat
25068-38-6	Epichlorohydrin-bisphenol A resin	11400 mg/kg Rat	>5000	25 g/L
78-93-3	Methyl Ethyl Ketone	2483 mg/kg Rat	5000 mg/kg Rabbit	N.Ĕ.
71-36-3	n-Butanol	700 mg/kg Rat	3402 mg/kg Rabbit	N.E.
108-38-3	meta-Xylene	5000 mg/kg Rat	12180 mg/kg Rabbit	N.E.
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.E.
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat
1333-86-4	Carbon Black	>15400 mg/kg Rat	Ň.E.	N.E.

N.E. - Not Established

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Do not incinerate closed containers. 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

UN Number:	Domestic (USDOT)	International (IMDG)	<u>Air (IATA)</u>	TDG (Canada)
	N.A.	1263	1263	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Paint	Paint	Paint Products in Limited Quantities
Hazard Class: Packing Group:	N.A.	3	3	N.A.
	N.A.	II	II	N.A.
Limited Quantity:	Yes	Yes	Cargo Aircraft Only	Yes

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:

Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Reproductive toxicity, Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

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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:

 Chemical Name
 CAS-No.

 Toluene
 108-88-3

 Methyl Ethyl Ketone
 78-93-3

 meta-Xylene
 108-38-3

 n-Butanol
 71-36-3

 Ethylbenzene
 100-41-4

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: 2* Flammability: 3 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 3 Instability 0

Volatile Organic Compounds 326 g/L SDS REVISION DATE: 8/1/2018

REASON FOR REVISION: Product Composition Changed

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

02 - Hazard Identification16 - Other Information

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

The manufacturer 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. The manufacturer 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.

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Safety Data Sheet



1. Identification

Product Name: ROHPER 1-GL ORGANIC PART B, 1-GAL

KH

Product Identifier: 303978

Recommended Use: Multicomponent Industrial Coating/

Solventborne

Supplier: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Rust-Oleum Canada (ROCA) 200 Confederation Parkway Concord, ON L4K 4T8

Canada

Emergency Phone: 800-387-3625

Preparer: Regulatory Department

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

Revision Date: 8/1/2018

Supercedes Date: 8/1/2018

Manufacturer: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

2. Hazard Identification

Classification

Symbol(s) of Product









Signal Word

Danger

Possible Hazards

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

GHS HAZARD STATEMENTS

Flammable Liquid, category 2 H225 Highly flammable liquid and vapour.

Carcinogenicity, category 2 H351 Suspected of causing cancer.

Reproductive Toxicity, category 2 H361 Suspected of damaging fertility or the unborn child.

STOT, single exposure, category 3, NE H336 May cause drowsiness or dizziness.

STOT, repeated exposure, category 2 H373 May cause damage to organs through prolonged or repeated exposure.

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Skin Corrosion, category 1 H314 Causes severe skin burns and eye damage.

Skin Sensitizer, category 1 H317 May cause an allergic skin reaction.

GHS LABEL PRECAUTIONARY STATEMENTS

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/

shower

P370+P378 In case of fire: Use alcohol film forming foam, carbon dioxide, dry chemical, dry sand to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local, regional and national regulations.

P201 Obtain special instructions before use.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P271 Use only outdoors or in a well-ventilated area.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P310 If exposed immediately call a POISON CENTER or doctor/physician.

P321 For specific treatment see label

P272 Contaminated work clothing should not be allowed out of the workplace.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

GHS SDS PRECAUTIONARY STATEMENTS

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P363 Wash contaminated clothing before reuse.

3. Composition / Information On Ingredients

HAZARDOUS SUBSTANCES				
<u>Chemical Name</u>	CAS-No.	<u>Wt.%</u>	GHS Symbols	GHS Statements
Toluene	108-88-3	47	GHS02-GHS07- GHS08	H225-304-315-332-336-361-373
2-Propanol	67-63-0	15	GHS02-GHS07	H225-302-319-336
Tris-2,4,6-(Dimethylaminomethyl)Phenol	90-72-2	7.0	GHS05-GHS07	H302-312-314
Benzyl Alcohol	100-51-6	7.0	GHS07	H302-312-320-332
Polyoxypropylenediamine	9046-10-0	7.0	GHS05	H314
1,2-Diaminocyclohexane	694-83-7	7.0	GHS05-GHS07	H314-317
meta-Xylene	108-38-3	2.0	GHS02-GHS07	H226-315-332
Ethylbenzene	100-41-4	1.0	GHS02-GHS07- GHS08	H225-304-332-351-373

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. Immediately flush skin with plenty of water for at least 15 minutes while removing clothing. Get medical attention immediately. Wash clothing separately before reuse. Destroy contaminated shoes.

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: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention. If swallowed, do not induce vomiting. If victim is conscious and alert, give 2 to 4 cupfuls of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively. Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

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5. Fire-Fighting Measures

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

UNUSUAL FIRE AND EXPLOSION HAZARDS: No unusual fire or explosion hazards noted. Closed containers may explode when exposed to extreme heat due to buildup of steam. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated. Containers can rupture and release highly toxic material if exposed to heat. Substance is non-combustible but reacts with many metals to form explosive hydrogen gas.

Special Fire and Explosion Hazard (Combustible Dust): No Information

Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Avoid runoff into sewers and waterways. Provide ventilation and approach spill from upwind using proper personal protective equipment as indicated in Section 8. Carefully neutralize spill with sodium bicarbonate (NaHCO3). Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and 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: Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials. Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids.

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Toluene	108-88-3	50.0	20 ppm	N.E.	200 ppm	300 ppm
2-Propanol	67-63-0	20.0	200 ppm	400 ppm	400 ppm	N.E.
Tris-2,4,6- (Dimethylaminomethyl)Phenol	90-72-2	10.0	N.E.	N.E.	N.E.	N.E.
Benzyl Alcohol	100-51-6	10.0	N.E.	N.E.	N.E.	N.E.
Polyoxypropylenediamine	9046-10-0	10.0	N.E.	N.E.	N.E.	N.E.
1,2-Diaminocyclohexane	694-83-7	10.0	N.E.	N.E.	N.E.	N.E.
meta-Xylene	108-38-3	5.0	100 ppm	150 ppm	N.E.	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	N.E.	100 ppm	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

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EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

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.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Appearance:	Liquid	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Relative Density:	0.466	pH:	N.A.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Slight	Partition Coefficient, n-octanol/	N.D.
Decompostion Temp., °C:	N.D.	water:	N.D.
Boiling Range, °C:	80 - 232	Explosive Limits, vol%:	1.1 - 27.0
Flammability:	Supports Combustion	Flash Point, °C:	3
Evaporation Rate:	Slower than Ether	Auto-ignition Temp., °C:	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 temperatures above 120°F (49°C). Avoid all possible sources of ignition. Avoid contact with metals.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies. Product slowly corrodes copper, aluminum, zinc, and galvanized surfaces.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde. Decomposition produces hydrogen chloride, chlorine and hydrogen gases.

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 Serious Eye IrritationSubstance causes severe eye irritation. Injury may be permanent.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May be absorbed through the skin in harmful amounts. Causes skin irritation. Allergic reactions are possible. Severely irritating; may cause permanent skin damage.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed. Corrosive and may cause severe and permanent damage to mouth, throat and stomach.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Repeated exposure to low concentrations of HCl vapor or mist may cause bleeding of nose and gums.

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

ACUTE TOXICITY VALUES

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

CAS-No.	<u>Chemical Name</u>	<u>Oral LD50</u>	Dermal LD50	Vapor LC50
108-88-3	Toluene	2600 mg/kg Rat	12000 mg/kg Rabbit	12.5 mg/L Rat
67-63-0	2-Propanol	1870 mg/kg Rat	4059 mg/kg Rabbit	72.6 mg/L Rat
90-72-2	Tris-2,4,6-(Dimethylaminomethyl)Phenol	1200 mg/kg Rat	1280 mg/kg Rat	25 mg/L
100-51-6	Benzyl Alcohol	1230 mg/kg Rat	2000 mg/kg Rabbit	11 mg/L Rat
9046-10-0	Polyoxypropylenediamine	2885 mg/kg Rat	2979 mg/kg Rabbit	25 mg/L
694-83-7	1,2-Diaminocyclohexane	4556 mg/kg Rat	N.E.	N.E.

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 108-38-3
 meta-Xylene
 5000 mg/kg Rat
 12180 mg/kg Rabbit
 N.E.

 100-41-4
 Ethylbenzene
 3500 mg/kg Rat
 15400 mg/kg Rabbit
 17.4 mg/L Rat

N.F. - Not Established

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Do not incinerate closed containers. 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. RCRA Hazardous Waste: This material, when discarded or disposed of, could be a hazardous waste according to federal regulations (40 CFR 261) due to the characteristic of corrosivity (D002). Check state and local regulations for disposal requirements. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate.

14. Transport Information

<u> </u>				
	Domestic (USDOT)	International (IMDG)	Air (IATA)	TDG (Canada)
UN Number:	N.A.	1263	1263	N.A.
Proper Shipping Name:	Paint Products in Limited Quantities	Paint	Paint	Paint Products in Limited Quantities
Hazard Class:	N.A.	3	3	N.A.
Packing Group:	N.A.	II	II	N.A.
Limited Quantity:	Yes	Yes	No	Yes

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:

Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Reproductive toxicity, Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Specific target organ toxicity (single or repeated exposure)

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:

<u>Chemical Name</u>	CAS-No.
Toluene	108-88-3
meta-Xylene	108-38-3
Ethylbenzene	100-41-4

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.

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16. Other Information

HMIS RATINGS

Health: 2* Flammability: 3 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 3 Instability 0

Volatile Organic Compounds 343 g/L SDS REVISION DATE: 8/1/2018

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

14 - Transport Information

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

The manufacturer 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. The manufacturer 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.

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Safety Data Sheet



1. Identification

Product Name: ROHPER 1-GL ZINC DUST FOR GALLON

KITS

Product Identifier: 303979

Recommended Use: Kit Component/Industrial Coating

Supplier: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

Rust-Oleum Canada (ROCA) 200 Confederation Parkway Concord, ON L4K 4T8

Canada

Emergency Phone: 800-387-3625

Preparer: Regulatory Department

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

Revision Date: 8/1/2018

Supercedes Date: 4/10/2017

Manufacturer: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

2. Hazard Identification

Classification

Symbol(s) of Product



Signal Word Warning

GHS HAZARD STATEMENTS

Acute Toxicity, Oral, category 4 H302 Harmful if swallowed.

GHS LABEL PRECAUTIONARY STATEMENTS

P264 Wash hands thoroughly after handling.

P330 Rinse mouth.

P501 Dispose of contents/container in accordance with local, regional and national regulations.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

GHS SDS PRECAUTIONARY STATEMENTS

Date Printed: 8/1/2018

P270 Do not eat, drink or smoke when using this product.

3. Composition / Information On Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	CAS-No.	<u>Wt.%</u>	GHS Symbols	GHS Statements
Zinc	7440-66-6	98	GHS07	H302
Zinc Oxide	1314-13-2	2.5	Not Available	Not Available

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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.

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

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

Special Fire and Explosion Hazard (Combustible Dust): No Information

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: 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. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and 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: Store in a dry, well ventilated place. Keep container tightly closed when not in use.

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Zinc	7440-66-6	100.0	N.E.	N.E.	N.E.	N.E.
Zinc Oxide	1314-13-2	5.0	2 mg/m3	10 mg/m3	5 mg/m3	N.E.

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PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve crossventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

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.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Appearance:	Particulate Solid	Physical State:	Liquid
Odor:	None	Odor Threshold:	N.E.
Relative Density:	7.016	pH:	N.A.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Negligible	Partition Coefficient, n-octanol/	N.D.
Decompostion Temp., °C:	N.D.	water:	N.D.
Boiling Range, °C:	537 - 537	Explosive Limits, vol%:	N.A N.A.
Flammability:	Does not Support Combustion	Flash Point, °C:	537
Evaporation Rate:	Slower than Ether	Auto-ignition Temp., °C:	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: No Information

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

HAZARDOUS DECOMPOSITION: 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: Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: 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: Eye Contact, Ingestion, Inhalation, Skin Absorption, 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
7440-66-6	Zinc	630 mg/kg Rat	N.E.	N.E.
1314-13-2	Zinc Oxide	>5000 mg/kg Rat	N.E.	N.E.

N.E. - Not Established

Date Printed: 8/1/2018 Page 4 / 5

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.

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:

Acute Toxicity (any route of exposure)

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:

 Chemical Name
 CAS-No.

 Zinc
 7440-66-6

 Zinc Oxide
 1314-13-2

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.

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16. Other Information

HMIS RATINGS

Health: 2* Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 1 Instability 0

Volatile Organic Compounds 0 g/L SDS REVISION DATE: 8/1/2018

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

02 - Hazard Identification

03 - Composition/Information on Ingredients

11 - Toxicological Information15 - Regulatory Information16 - Other Information

Revision Statement(s) Changed

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

The manufacturer 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. The manufacturer 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.