ENNIS-FLINT A Traffic Safety Solutions Company

Material Safety Data Sheet

Issuing Date 15-Aug-2011 Revision Date 08-Aug-2012 Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name 1166 Rainline WHITE: RLOR-1W

Product Code(s) 884222

Recommended Use Traffic paint

Product Technology Thermo

Supplier Address

Ennis-Flint

5910 North Central Expressway

Suite 1050 Dallas TX 75206 T: 800.331.8118

800.331.8118 (For Technical Inquiries)

Emergency Telephone

Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Product dust may be irritating to eyes, skin and respiratory system May cause respiratory impairment and lung damage

Cancer hazard

WARNING! This product contains a chemical known in the State of California to cause cancer.

Appearance White Physical State Solid. Odor Odorless

Potential Health Effects

Acute Toxicity

Eyes May cause irritation. The molten product can cause serious burns.

Skin May cause irritation. The molten product can cause serious burns.

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system.

Excessive inhalation of vapors in molten state can cause nose and throat irritation, may cause nervous system depression characterized by headache, dizziness, nausea,

staggering gait, confusion and unconsciousness. In molten state, the material does not give

off fumes that are toxic or injurious to persons or property.

Ingestion Ingestion may cause irritation to mucous membranes.

Chronic Effects Inhalation overexposure to free crystalline silica may cause delayed lung injury including

silicosis, a disabling and potentially fatal lung disease. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

Aggravated Medical Conditions Respiratory disorders. Lungs.

Environmental Hazard Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

3. COMPOSITION/INFORMATION ON INGREDIENTS

environment. See Section 12 for additional Ecological Information.

| Chemical Name | CAS-No | Weight % |
|--|------------|----------|
| Glass, oxide | 65997-17-3 | 15-40 |
| Limestone | 1317-65-3 | 10-30 |
| Titanium dioxide | 13463-67-7 | 7-13 |
| Calcium carbonate | 471-34-1 | 3-7 |
| Petroleum distillates, hydrotreated heavy paraffinic | 64742-54-7 | 1-5 |
| Quartz | 14808-60-7 | 0.1-1 |

4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician. Contact with molten materials, requires immediate

medical assistance.

Skin Contact Wash off with warm water and soap. If skin irritation persists, call a physician. In case of

> burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. Removal of solidified molten material from skin requires medical assistance. If burned by contact with molten material, remove patient from heat source. Remove smoldering clothing, including shoes, boots and jewelry. Cool the burn with water or saline until the skin returns to normal temperature. Cover patient with dry clean sheet. Do not attempt to remove the molten thermoplastic from the skin. Removal could result in severe tissue damage. Do not use ice. Conduct primary survey. If indicated

transport patient to emergency treatment facility.

Move to fresh air. If symptoms persist, call a physician. Inhalation

Ingestion Clean mouth with water and afterwards drink plenty of water. Consult a physician.

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Not flammable. Flammable Properties

> 500 °F **Flash Point**

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Explosion Data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

(approved or equivalent) and full protective gear.

NFPA Health Hazard 1 Flammability 1 Instability 0 Physical and Chemical

Hazards -

Health Hazard 1* Flammability 1 Physical Hazard 0 **HMIS Personal Protection X**

^{*}Indicates a chronic health hazard.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

Environmental Precautions Prevent product from entering drains. Do not flush into surface water or sanitary sewer

system.

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Use personal protective equipment. Avoid dust formation. Cover powder spill with plastic

sheet or tarp to minimize spreading and keep powder dry. Take up mechanically and collect

in suitable container for disposal.

7. HANDLING AND STORAGE

HandlingEnsure adequate ventilation. Avoid breathing dust. Wear personal protective equipment. Avoid dust formation. Fine dust dispersed in air may ignite.

Do not heat over 500°F in a closed container. This product when heated to above 500°F can lead to flashing. Appropriate protective equipment must be worn when mixing and

applying this product.

The thermoplastic bag can be hazardous when empty, because it can retain product residue. Therefore do not reuse container for food, clothing, or products for human or animal consumption or where skin contact may occur. Always obey hazard warnings and handle containers as if they were full.

The meltable bag is compatible with the thermoplastic allowing them to melt and become part of the hot melt mixture at application temperature.

Keep container tightly closed. Keep in properly labeled containers. Keep out of the reach of

children.

Storage

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|--|
| Limestone 1317-65-3 | - | TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction | TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust |
| Titanium dioxide 13463-67-7 | TWA: 10 mg/m³ | TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust | IDLH: 5000 mg/m³ |
| Calcium carbonate 471-34-1 | - | TWA: 15 mg/m ³ TWA: 5 mg/m ³ (vacated) TWA: 15 mg/m ³ (vacated) TWA: 5 mg/m ³ | TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust |
| Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7 | TWA: 5 mg/m³, as oil mist, mineral STEL: TWA: 10 mg/m³, as oil mist, mineral | TWA: 5 mg/m ³ , as oil mist, mineral | |
| Quartz 14808-60-7 | TWA: 0.025 mg/m ³ respirable fraction | 30/(%SiO2+2) mg/m³ TWA, Total Dust;250/%SiO2+5) mppcf TWA, respirable fraction; 10/(%SiO2+2) mg/m³ TWA, respirable TWA: 0.1 mg/m³ (vacated) | TWA: 0.05 mg/m³ respirable dust |

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992).

Engineering Measures Showers

Eyewash stations Ventilation systems

Personal Protective Equipment

Eye/Face Protection Safety glasses with side-shields. For handling molten material, use of a faceshield is

recommended.

Skin and Body Protection Respiratory Protection

Protective gloves. When handling molten materials, use of long sleeved shirts is required. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

Hygiene Measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before

re-use. Provide regular cleaning of equipment, work area and clothing.

Not applicable

Not applicable

9. PHYSICAL AND CHEMICAL PROPERTIES

AppearanceWhite.OdorOdorless.Odor ThresholdNot applicablePhysical StateSolid

pH Not applicable
Flash Point > 500 °F
Decomposition Temperature Not applicable

Melting Point/Range Not applicable

Flammability Limits in Air Not applicable

Autoignition Temperature

Boiling Point/Boiling Range

Specific Gravity2.4Water SolubilityInsoluble in water.SolubilityNot applicableEvaporation RateNot applicableVapor PressureNot applicableVapor DensityNot applicable

VOC (g/I) 0

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible Products None known based on information supplied.

Conditions to Avoid Dust formation.

Hazardous Decomposition Products Carbon oxides.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product InformationNo acute toxicity information is available for this product.

Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--|--------------------|----------------------|-----------------------|
| Calcium carbonate | = 6450 mg/kg (Rat) | | |
| Petroleum distillates, hydrotreated heavy paraffinic | > 2000 mg/kg (Rat) | > 2000 mg/kg(Rabbit) | = 2.18 mg/L (Rat) 4 h |
| Quartz | 500 mg/kg (Rat) | | |

Chronic Toxicity

Chronic Toxicity

Inhalation overexposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--|-------|----------|-------|------|
| Glass, oxide | | Group 3 | | |
| Titanium dioxide | | Group 2B | | Х |
| Petroleum distillates, hydrotreated heavy paraffinic | A2 | Group 1 | | |
| Quartz | A2 | Group 1 | Known | X |

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3: Not Classifiable as to its Carcinogenicity to Humans

NTP: (National Toxicity Program) Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Target Organ Effects Respiratory system. Eyes. Skin. Lungs.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|-------------------------------|-------------------|------------------------|-------------------------------|-------------------------------|
| Petroleum distillates, | | LC50 96 h: > 5000 mg/L | | EC50 48 h: > 1000 mg/L |
| hydrotreated heavy paraffinic | | (Oncorhynchus mykiss) | | (Daphnia magna) |

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40

CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local

regulations for additional requirements.

Contaminated Packaging Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated (Product as shipped)

Proper shipping name Elevated temperature liquid, n.o.s. (Product in use)

Description ELEVATED TEMPERATURE MATERIAL, LIQUID, N.O.S. (COMPOUND PAVEMENT

MARKING), 9, UN 3257, III. (Product in use)

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

Marine Pollutant Product is a marine pollutant according to the criteria set by IMDG/IMO

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health HazardNoChronic Health HazardYesFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

| Chemical Name | CAS-No | California Prop. 65 |
|---------------|------------|---------------------|
| Quartz | 14808-60-7 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Illinois | Rhode Island |
|------------------|------------|---------------|--------------|----------|--------------|
| Limestone | X | X | X | | Х |
| Titanium dioxide | Х | Х | Х | = | Х |
| Quartz | Х | Х | X | - | Х |

International Regulations

| Chemical Name | Carcinogen Status | Exposure Limits |
|------------------|-------------------|------------------------------------|
| Limestone | | Mexico: TWA 10 mg/m ³ |
| | | Mexico: STEL 20 mg/m ³ |
| Titanium dioxide | | Mexico: TWA= 10 mg/m ³ |
| | | Mexico: STEL= 20 mg/m ³ |
| Quartz | | Mexico: TWA= 0.1 mg/m ³ |

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

D2A Very toxic materials



16. OTHER INFORMATION

Prepared By Product Stewardship

23 British American Blvd. Latham, NY 12110 1-800-572-6501

Issuing Date15-Aug-2011Revision Date08-Aug-2012

Revision Note (M)SDS sections updated: 1, 2, 4, 7, 9

General Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication and it does not purport to be all inclusive and shall be used only as a guide. We urge each customer or recipient of this MSDS to study it carefully to become aware of and understand the potential hazards associated with the product. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. Any use of the product not in conformance with this MSDS or in combination with any other product or process is the responsibility of the user. Customary precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Remove all soiled and contaminated clothing immediately.

End of Safety Data Sheet