

SAFETY DATA SHEET



Revision Date 12-Apr-2016
Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name 6980 Rustlok Steel Primer
Product code 1698000

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Paint Related Material
Restrictions on use Read label instructions and SDS

1.3 Details of the supplier of the safety data sheet

Supplier Kop-Coat, Inc. / Pettit Marine Paint
Marine Group
36 Pine Street
Rockaway, NJ 07866
1-800-221-4466

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 3

2.2 Label elements

Signal Word

Danger

Hazard Statements

Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Suspected of causing cancer
May cause respiratory irritation. May cause drowsiness or dizziness
Causes damage to organs through prolonged or repeated exposure
Flammable liquid and vapor



Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/Bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
If skin irritation or rash occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing
If experiencing respiratory symptoms: Call a POISON CENTER or doctor
In case of fire: Use CO₂, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity

< 1% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients**Substance**

Not applicable

Mixture

Chemical Name	CAS-No	Weight %
Polyisocyanate prepolymer based on diphenylmethane diisocyanate (MDI)	Proprietary	30 - 40
Aluminium powder	7429-90-5	10 - 20
1,2,4-Trimethylbenzene	95-63-6	5 - 10
Distillates, petroleum, hydrotreated light	64742-47-8	5 - 10
4,4-METHYLENE BIS(PHENYLISOCYANATE)	101-68-8	1 - 5
Ethyl Orthoformate	122-51-0	1 - 5
POLYMETHYLENE POLYPHENYL ISOCYANATE	9016-87-9	1 - 5
Diphenylmethane Diisocyanate	26447-40-5	1 - 5
CUMENE	98-82-8	< 1

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures**4.1 Description of first-aid measures****General advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician or poison control center immediately.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician or poison control center immediately.

Inhalation

Move victim to fresh air. If not breathing, give artificial respiration. Keep victim warm and quiet. Call a physician or poison control center immediately.

Ingestion

Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Call a physician or poison control center immediately. Gently wipe or rinse the inside of the mouth with water. Never give fluids if the victim is unconscious or having convulsions.

4.2 Most important symptoms and effects, both acute and delayed**Symptoms**

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Difficulty in breathing. Burning. Coughing and/ or wheezing. Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.

4.3 Indication of any immediate medical attention and special treatment needed**Notes to physician**

There is no specific antidote for effects from overexposure to this material. Treat symptomatically. Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Foam. Carbon dioxide (CO₂). Dry chemical. Water spray or fog. Water may be used to cool and prevent the rupture of containers that are exposed to the heat from a fire.

Unsuitable Extinguishing Media Water may be unsuitable for extinguishing fires.

5.2 Special hazards arising from the substance or mixture

Special Hazard

Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks) Vapors may travel to areas away from work site before igniting/flashing back to vapor source Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Combustion Products Possible formation of carbon oxides, nitrogen oxides, and hazardous organic compounds. Isocyanate vapors.

Explosion Data

Sensitivity to Mechanical Impact Not sensitive.

Sensitivity to Static Discharge Yes.

5.3 Advice for firefighters

Evacuate personnel to safe areas. Move non-burning material, as feasible, to a safe location as soon as possible. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out. Thoroughly decontaminate all protective equipment after use. DO NOT extinguish a fire resulting from the flow of flammable liquid until the flow of the liquid is effectively shut off. This precaution will help prevent the accumulation of an explosive vapor-air mixture after the initial fire is extinguished. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak. Wear protective gloves/clothing and eye/face protection. Thoroughly decontaminate all protective equipment after use. Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas. Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Do not fill waste container more than 2/3 full to allow for expansion, and do not tighten the lid on the container.

Methods for cleaning up

Take up with sand, earth or other noncombustible absorbent material. Clean contaminated surface thoroughly. Do not fill waste container more than 2/3 full to allow for expansion, and do not tighten the lid on the container. Neutralise with Isocyanate neutralization solution (Spartan Chemical Co., Colorimetric Laboratories, 80% water/20% non-ionic surfactant).

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Do not breathe vapors or spray mist. Ensure adequate ventilation. Ground and bond containers when transferring material. Handle in accordance with good industrial hygiene and safety practice. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Use according to package label instructions. Empty containers may retain product residue or vapor. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. No smoking. Do not get in eyes, on skin, or on clothing. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Hygiene measures

Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Wash hands and face before breaks and immediately after handling the product. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep in properly labeled containers. Keep away from food, drink and animal feeding stuffs. Store in accordance with local regulations. Keep at temperatures below 40°C.

Materials to Avoid

Water. Amines. Strong bases. Alcohols. Copper alloys.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWA EV
Aluminium powder 7429-90-5	TWA: 1 mg/m ³ respirable fraction	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction	TWA: 1.0 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 1 mg/m ³
Distillates, petroleum, hydrotreated light 64742-47-8	-	-	TWA: 200 mg/m ³ Skin			
4,4-METHYLENE BIS(PHENYLISOCYANATE) 101-68-8	TWA: 0.005 ppm	Ceiling: 0.02 ppm Ceiling: 0.2 mg/m ³	TWA: 0.005 ppm Ceiling: 0.01 ppm Skin Sensitizer	TWA: 0.005 ppm TWA: 0.05 mg/m ³	TWA: 0.005 ppm TWA: 0.051 mg/m ³	TWA: 0.005 ppm CEV: 0.02 ppm
POLYMETHYLENE POLYPHENYL ISOCYANATE 9016-87-9	-	-		TWA: 0.005 ppm TWA: 0.07 mg/m ³		
Diphenylmethane Diisocyanate 26447-40-5	-	Ceiling: 0.02 ppm Ceiling: 0.2 mg/m ³	TWA: 0.005 ppm Ceiling: 0.01 ppm			
CUMENE 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m ³ S*	TWA: 25 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 50 ppm

8.2 Appropriate engineering controls

Engineering Measures

Use process enclosures, local exhaust ventilation, or other engineering controls to keep

airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tightly fitting safety goggles. If splashes are likely to occur, wear: Face-shield.
Skin and body protection	Avoid all skin contact. Depending on the conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact. Animal tests and research indicates that skin contact with MDI can play a role in causing isocyanate sensitization and respiratory reaction. Protective gloves. Nitrile rubber. Impervious butyl rubber gloves. PVC gloves > 1 mm thickness. Long sleeved clothing. Chemical resistant apron. Protective shoes or boots. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.
Hygiene measures	See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Color	Aluminum metallic
Odor	Hydrocarbon-like
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH		No information available
Melting/freezing point		No information available
Boiling point/boiling range		No information available
Flash Point	41 °C / 105 °F	
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity		No information available
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic	> 22 mm ² /s	
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content	467 g/L
Density	8.97 lb/gal

10. Stability and Reactivity

10.1 Reactivity

Contact with moisture, other materials that react with isocyanates, or temperatures above 350 deg F (177 C) may cause polymerization.

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Contact with moisture, other materials that react with isocyanates, or temperatures above 350 deg F (177 C) may cause polymerization.

10.5 Incompatible Materials

Water. Amines. Strong bases. Alcohols. Copper alloys.

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of toxic/corrosive gases and vapors. Isocyanate vapors.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50	3,330.00 mg/kg
Dermal LD50	14,768.00 mg/kg
LC50 (Dust/Mist)	3.50 mg/l
LC50 (Vapor)	81.00 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aluminium powder 7429-90-5	> 2002 mg/kg (rat)	-	-
1,2,4-Trimethylbenzene 95-63-6	3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m ³ (Rat) 4 h
Distillates, petroleum, hydrotreated light 64742-47-8	5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
4,4-METHYLENE BIS(PHENYLISOCYANATE) 101-68-8	31600 mg/kg (Rat)	-	= 369 mg/m ³ (Rat) 4 h
Ethyl Orthoformate 122-51-0	7060 mg/kg (Rat)	-	-
POLYMETHYLENE POLYPHENYL ISOCYANATE 9016-87-9	-	-	= 490 mg/m ³ (Rat) 4 h
Diphenylmethane Diisocyanate 26447-40-5	7400 mg/kg (Rat)	> 6200 mg/kg (Rabbit)	= 0.369 mg/L (Rat) 4 h

CUMENE 98-82-8	1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	8700 ppm (Rat) 4-h
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11.2 Information on toxicological effects

Skin corrosion/irritation

Product Information

- May cause irritation
- Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons

Component Information

- No information available

Serious eye damage/eye irritation

Product Information

- Irritating to eyes
- Liquid or vapor may cause irritation.

Component Information

- No information available

Respiratory or skin sensitization

Product Information

- May cause sensitization by inhalation and skin contact
- Isocyanate vapors or mist at concentrations above the TLV or PEL can irritate (burning sensation) the mucous membranes of the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g. fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

Component Information

- No information available

Germ cell mutagenicity

Product Information

- No information available

Component Information

- No information available

Carcinogenicity

Product Information

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

Component Information

- Contains a known or suspected carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
CUMENE 98-82-8	-	Group 2B	Reasonably Anticipated	

Reproductive toxicity

Product Information

- No information available

Component Information

- No information available

STOT - single exposure

No information available

STOT - repeated exposure

No information available

Other adverse effects

Product Information

- No information available

Component Information

- No information available

Aspiration hazardProduct Information

- No information available

Component Information

- No information available

12. Ecological information

12.1 Toxicity**Ecotoxicity**

No information available

52.92226 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
1,2,4-Trimethylbenzene 95-63-6	-	LC50: 96 h Pimephales promelas 7.19 - 8.28 mg/L flow-through	EC50: 48 h Daphnia magna 6.14 mg/L
Distillates, petroleum, hydrotreated light 64742-47-8	-	LC50: 96 h Pimephales promelas 45 mg/L flow-through LC50: 96 h Lepomis macrochirus 2.2 mg/L static LC50: 96 h Oncorhynchus mykiss 2.4 mg/L static	-
CUMENE 98-82-8	EC50: 72 h Pseudokirchneriella subcapitata 2.6 mg/L	LC50: 96 h Pimephales promelas 6.04 - 6.61 mg/L flow-through LC50: 96 h Oncorhynchus mykiss 4.8 mg/L flow-through LC50: 96 h Oncorhynchus mykiss 2.7 mg/L semi-static LC50: 96 h Poecilia reticulata 5.1 mg/L semi-static	EC50: 48 h Daphnia magna 0.6 mg/L EC50: 48 h Daphnia magna 7.9 - 14.1 mg/L Static

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
1,2,4-Trimethylbenzene 95-63-6	3.63
Ethyl Orthoformate 122-51-0	1.2
Diphenylmethane Diisocyanate 26447-40-5	4.5
CUMENE 98-82-8	3.55

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

Note	DOT Ground - "Non-bulk shipments may be non-regulated per 49CFR 173.150(f)(2)"
DOT	Not regulated (If shipped in NON BULK packaging by ground transport)
MEX	no data available
IMDG	
Proper shipping name	UN1263, Paint, 3, III
IATA	
Proper shipping name	UN1263, Paint, 3, III

15. Regulatory information

15.1 International Inventories

TSCA	Complies
DSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values %
Aluminium powder 7429-90-5	1.0
1,2,4-Trimethylbenzene 95-63-6	1.0
4,4-METHYLENE BIS(PHENYLISOCYANATE) 101-68-8	1.0
POLYMETHYLENE POLYPHENYL ISOCYANATE 9016-87-9	1.0
Diphenylmethane Diisocyanate 26447-40-5	1.0

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
CUMENE - 98-82-8	Carcinogen

16. Other information

NFPA	Health Hazard 2	Flammability 2	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2*	Flammability 2	Physical Hazard 0	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

Revision Date 12-Apr-2016

Revision Note

No information available

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. 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 as 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.

End of Safety Data Sheet