SAFETY DATA SHEET

1. Identification

Product identifier	FROST GRAY 325023 - ROOF FLASHING PAINT		
Other means of identification			
Product code	325023		
Recommended use	Flashing Paint		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/Distributor information			
Manufacturer			
Company name	ROOFMASTER PRODUCTS COMPANY		
Address	750 MONTEREY PASS ROAD		
	MONTEREY PARK, CA 91754-3607		
	United States		
Telephone	1(323) 261-5122		
E-mail	Not available.		
Emergency phone number	1(800) 255-3924 [Chem-Tel]		
2. Hazard(s) identification			

Physical hazards	Flammable aerosols	Category 1
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 2
	Reproductive toxicity (fertility, the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	

Label elements



Signal word Hazard statement

Extremely flammable aerosol. Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause genetic defects. Suspected of causing cancer. Suspected of damaging the unborn child. Suspected of damaging fertility. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	84.85% of the mixture consists of component(s) of unknown acute oral toxicity. 92.26% of the mixture consists of component(s) of unknown acute dermal toxicity. 83.01% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 83.01% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ACETONE		67-64-1	30-45
BUTANE		106-97-8	10-25
PROPANE		74-98-6	10-25
ETHYL BENZENE		100-41-4	<10
n-BUTYL ALCOHOL		71-36-3	<10
TALC		14807-96-6	<10
TITANIUM DIOXIDE		13463-67-7	<10
TOLUENE		108-88-3	<10
XYLENE		1330-20-7	<10
AROMATIC HYDROCARBON		64742-94-5	<1
ZINC OXIDE		1314-13-2	<1
ZINC PHOSPHATE		7779-90-0	<1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Powder. Alcohol resistant foam. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol.
6. Accidental release meas	sures
Personal precautions,	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do

protective equipment and emergency procedures	appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Refer to attached safety data sheets and/or instructions for use. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.
7. Handling and storage	
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Level 3 Aerosol.
including any incompatibilities	Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Keep out of the reach of children. Store away from

incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
ACETONE (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
AROMATIC	PEL	400 mg/m3	
IYDROCARBON (CAS		-	
64742-94-5)			
		100 ppm	
ETHYL BENZENE (CAS	PEL	435 mg/m3	
100-41-4)		100	
		100 ppm	
n-BUTYL ALCOHOL (CAS	PEL	300 mg/m3	
71-36-3)		100 ppm	
	DEL	100 ppm	
PROPANE (CAS 74-98-6)	PEL	1800 mg/m3	
		1000 ppm	Tatal 1
	PEL	15 mg/m3	Total dust.
13463-67-7)			
XYLENE (CAS 1330-20-7)	PEL	435 mg/m3	
		100 ppm	_
ZINC OXIDE (CAS	PEL	5 mg/m3	Fume.
1314-13-2)		E	Doonirable freetier
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
JS. OSHA Table Z-2 (29 CFR 1910	-		
Components	Туре	Value	
TOLUENE (CAS 108-88-3)	Ceiling	300 ppm	
, , ,	TWA	200 ppm	
US. OSHA Table Z-3 (29 CFR 1910	.1000)		
Components	́ Туре	Value	Form
	TWA	0.2 ma/m2	Total dust.
TALC (CAS 14807-96-6)	IVVA	0.3 mg/m3	
		0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.
US. ACGIH Threshold Limit Values	6		
Components	Туре	Value	Form
ACETONE (CAS 67-64-1)	STEL	750 ppm	
		500 ppm	
	TWA		Non corocol
	TWA TWA	200 mg/m3	Non-aerosol.
HYDROCARBON (CAS			Non-aerosol.
AROMATIC HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8)	TWA	200 mg/m3	Non-aerosol.
HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8)	TWA	200 mg/m3 1000 ppm	Non-aerosol.
HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS	TWA	200 mg/m3	Non-aerosol.
HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4)	TWA STEL TWA	200 mg/m3 1000 ppm 20 ppm	Non-aerosol.
HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS	TWA	200 mg/m3 1000 ppm	Non-aerosol.
HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3)	TWA STEL TWA TWA	200 mg/m3 1000 ppm 20 ppm 20 ppm	
HYDROCARBON (CAS 54742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) TALC (CAS 14807-96-6)	TWA STEL TWA TWA TWA	200 mg/m3 1000 ppm 20 ppm 20 ppm 2 mg/m3	Non-aerosol. Respirable fraction.
HYDROCARBON (CAS 54742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) TALC (CAS 14807-96-6) TITANIUM DIOXIDE (CAS	TWA STEL TWA TWA	200 mg/m3 1000 ppm 20 ppm 20 ppm	
HYDROCARBON (CAS 54742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) TALC (CAS 14807-96-6) TITANIUM DIOXIDE (CAS 13463-67-7)	TWA STEL TWA TWA TWA	200 mg/m3 1000 ppm 20 ppm 20 ppm 2 mg/m3 10 mg/m3	
HYDROCARBON (CAS 54742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) FALC (CAS 14807-96-6) FITANIUM DIOXIDE (CAS 13463-67-7) FOLUENE (CAS 108-88-3)	TWA STEL TWA TWA TWA TWA TWA	200 mg/m3 1000 ppm 20 ppm 20 ppm 2 mg/m3 10 mg/m3 20 ppm	
HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS	TWA STEL TWA TWA TWA TWA STEL	200 mg/m3 1000 ppm 20 ppm 20 ppm 2 mg/m3 10 mg/m3 20 ppm 150 ppm	
HYDROCARBON (CAS 54742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) TALC (CAS 14807-96-6) TITANIUM DIOXIDE (CAS 13463-67-7) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7)	TWA STEL TWA TWA TWA TWA STEL TWA	200 mg/m3 1000 ppm 20 ppm 20 ppm 2 mg/m3 10 mg/m3 20 ppm 150 ppm 100 ppm	Respirable fraction.
HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) TALC (CAS 14807-96-6) TITANIUM DIOXIDE (CAS 13463-67-7) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) ZINC OXIDE (CAS	TWA STEL TWA TWA TWA TWA STEL	200 mg/m3 1000 ppm 20 ppm 20 ppm 2 mg/m3 10 mg/m3 20 ppm 150 ppm	
HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) TALC (CAS 14807-96-6) TITANIUM DIOXIDE (CAS 13463-67-7) TOLUENE (CAS 108-88-3)	TWA STEL TWA TWA TWA TWA STEL TWA	200 mg/m3 1000 ppm 20 ppm 20 ppm 2 mg/m3 10 mg/m3 20 ppm 150 ppm 100 ppm	Respirable fraction.

Biological limit values

ACGIH Biological Exposu Components	re Indices Value	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
ETHYL BENZENE (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic	Creatinine in urine	*
TOLUENE (CAS 108-88-3)	0.3 mg/g	acid o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
XYLENE (CAS 1330-20-7)	-	Methylhippuric acids	Creatinine in urine	*
* - For sampling details, ple	ase see the source doo	cument.		
Exposure guidelines				
US - California OELs: Skir	n designation			
n-BUTYL ALCOHOL (0 TOLUENE (CAS 108-8	8-3)	Can be	absorbed throug absorbed throug	
US - Minnesota Haz Subs	Skin designation app	olies		
n-BUTYL ALCOHOL (C TOLUENE (CAS 108-8	8-3)		esignation applies	
US - Tennessee OELs: Sk	-			
n-BUTYL ALCOHOL (C US ACGIH Threshold Lim			absorbed throug	gh the skin.
AROMATIC HYDROCA		,	absorbed throug	gh the skin.
n-BUTYL ALCOHOL (C	CAS 71-36-3)	Can be	absorbed throug	gh the skin.
Appropriate engineering controls	should be matched or other engineerin exposure limits hav	I to conditions. If app g controls to mainta ve not been establis	blicable, use proo in airborne levels hed, maintain air	our) should be used. Ventilation rates cess enclosures, local exhaust ventilation, s below recommended exposure limits. If borne levels to an acceptable level. Eye e when handling this product.
ndividual protection measure				
Eye/face protection	Chemical respirato	r with organic vapor	cartridge and fu	Il facepiece.
Skin protection				
Hand protection	Wear appropriate o supplier.	chemical resistant gl	oves. Suitable gl	oves can be recommended by the glove
Other	Wear appropriate of	chemical resistant cl	othing. Use of ar	impervious apron is recommended.
Respiratory protection	Chemical respirato	r with organic vapor	cartridge and fu	Il facepiece.
Thermal hazards	Wear appropriate t	hermal protective cl	othing, when neo	essary.
General hygiene considerations	When using do not hygiene measures,	smoke. Keep away , such as washing a	from food and d fter handling the	rink. Always observe good personal material and before eating, drinking, and/c equipment to remove contaminants.

9. Physical and chemical properties

Liquid.
Aerosol.
Grey.
Solvent.
Not available.
Not available.
Not available.
-43.78 °F (-42.1 °C) estimated

n point	-133.6 °F (-92.0 °C)		
oration rate	Not available.		
mability (solid, gas)	Not applicable.		
er/lower flammability or exp	losive limits		
Flammability limit - lower %)	1.3 % estimated		
Flammability limit - upper %)	12.8 % estimated		
Explosive limit - lower (%)	Not available.		
Explosive limit - upper (%)	Not available.		
or pressure	2310.85 hPa estimated		
or density	Not available.		
tive density	Not available.		
bility(ies)			
Solubility (water)	Not available.		
tion coefficient ctanol/water)	Not available.		
-ignition temperature	550 °F (287.78 °C) estimated		
omposition temperature	Not available.		
osity	Not available.		
r information			
Density	6.64 lb/gal		
Flammability class	Flammable IA estimated		
Percent volatile	80.59 %w/w		
Specific gravity	0.8		
VOC (Weight %)	343.01 g/l MATERIAL 550.36 g/l COATING		
	oration rate mability (solid, gas) r/lower flammability or exp flammability limit - lower %) flammability limit - upper %) Explosive limit - lower (%) Explosive limit - upper (%) for pressure or density tive density bility(ies) Solubility (water) tion coefficient tanol/water) -ignition temperature oposition temperature posity r information Density flammability class Percent volatile Specific gravity		

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidizing agents. Nitrates. Halogens. Fluorine. Chlorine.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

internation on intery reated of e	<i>Apooli</i> o
Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Harmful in contact with skin. Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Headache. May cause drowsiness and dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Information on toxicological effe	ects
Acute toxicity	Harmful in contact with skin. Harmful if swallowed. Narcotic effects.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.

Respiratory or skin sensitizatior	1			
Respiratory sensitization	Not a respiratory sensitizer.			
Skin sensitization	This product is not expected t	o cause skin sensitization.		
Germ cell mutagenicity	May cause genetic defects.			
Carcinogenicity	Suspected of causing cancer.			
IARC Monographs. Overall I	Evaluation of Carcinogenicity			
ETHYL BENZENE (CAS TALC (CAS 14807-96-6)	100-41-4)	2B Possibly carcinogenic to humans. 2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.		
TITANIUM DIOXIDE (CA TOLUENE (CAS 108-88- XYLENE (CAS 1330-20-7	DE (CAS 13463-67-7)2B Possibly carcinogenic to humans.08-88-3)3 Not classifiable as to carcinogenicity to humans.			
-	d Substances (29 CFR 1910.1			
Not listed.				
US. National Toxicology Program (NTP) Report on Carcinogens				
Not available.				
Reproductive toxicity	Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Suspected of damaging fertility. Suspected of damaging the unborn child.			
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.			
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure.			
Aspiration hazard	Not an aspiration hazard.			
Chronic effects	Causes damage to organs thr harmful. Prolonged exposure	ough prolonged or repeated exposure. Prolonged inhalation may be may cause chronic effects.		

12. Ecological information

toxicity Toxic to aquatic life with long lasting effects.			
Components		Species	Test Results
ACETONE (CAS 67-64	1-1)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
AROMATIC HYDROC	ARBON (CAS 647	42-94-5)	
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
ETHYL BENZENE (CA	S 100-41-4)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	7.711 - 9.591 mg/l, 96 hours
		Fathead minnow (Pimephales promelas)	11.5 - 12.7 mg/l, 96 hours
n-BUTYL ALCOHOL ((CAS 71-36-3)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1897 - 2072 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	100 - 500 mg/l, 96 hours
TITANIUM DIOXIDE (0	CAS 13463-67-7)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours

	Species	Test Results
8-3)		
EC50	Water flea (Daphnia magna)	19.6 mg/l, 48 hours
LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	14.1 - 17.16 mg/l, 96 hours
0-7)		
LC50	Bluegill (Lepomis macrochirus)	10.464 - 16.114 mg/l, 96 hours
		7.711 - 9.591 mg/l, 96 hours
4-13-2)		
LC50	Fathead minnow (Pimephales promelas)	2246 mg/l, 96 hours
AS 7779-90-0)		
LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.09 mg/l, 96 hours
	EC50 LC50 D-7) LC50 4-13-2) LC50 AS 7779-90-0)	8-3) EC50 Water flea (Daphnia magna) LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss) D-7) LC50 Bluegill (Lepomis macrochirus) 4-13-2) LC50 Fathead minnow (Pimephales promelas) AS 7779-90-0) LC50 Rainbow trout,donaldson trout

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octar	nol / water (log Kow)
ACETONE	-0.24
BUTANE	2.89
ETHYL BENZENE	3.15
n-BUTYL ALCOHOL	0.88
PROPANE	2.36
TOLUENE	2.73
XYLENE	3.12 - 3.2
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transport information

DOT	
UN number	Not available.
UN proper shipping name	Consumer commodity
Transport hazard class(es)	
Class	ORM-D
Subsidiary risk	-
Label(s)	None
Packing group	Not applicable.

Special precautions for user Special provisions Packaging exceptions Packaging non bulk Packaging bulk IATA	Read safety instructions, SDS and emergency procedures before handling. Limited Quantity 156, 306 156, 306 None
UN number	ID8000
UN proper shipping name	Consumer commodity
Transport hazard class(es)	
Class	9
Subsidiary risk	ORM-D
Packing group	Not applicable.
Environmental hazards	No.
Special precautions for user Other information	Read safety instructions, SDS and emergency procedures before handling.
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.
IMDG	
UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	F-D, S-U
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.
IMDG	



15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US federal regulations

CERCLA Hazardous Substance List (40 CFR 302.4)

ACETONE (CAS 67-64-1)	Listed.
BUTANE (CAS 106-97-8)	Listed.
ETHYL BENZENE (CAS 100-41-4)	Listed.
n-BUTYL ALCOHOL (CAS 71-36-3)	Listed.
PROPANE (CAS 74-98-6)	Listed.
TOLUENE (CAS 108-88-3)	Listed.
XYLENE (CAS 1330-20-7)	Listed.
ZINC OXIDE (CAS 1314-13-2)	Listed.

ZINC PHOSPHATE (CAS SARA 304 Emergency relea	-	Listed.	
Not regulated. OSHA Specifically Regulate Not listed.	ed Substances (29 CFR 1910	0.1001-1050)	
Superfund Amendments and Re Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No	SARA)	
SARA 302 Extremely hazard Not listed.	dous substance		
SARA 311/312 Hazardous chemical	No		
SARA 313 (TRI reporting) Chemical name		CAS number	% by wt.
ETHYL BENZENE n-BUTYL ALCOHOL TOLUENE XYLENE ZINC OXIDE ZINC PHOSPHATE		100-41-4 71-36-3 108-88-3 1330-20-7 1314-13-2 7779-90-0	<10 <10 <10 <10 <1 <1
Other federal regulations			
Clean Air Act (CAA) Section			
ETHYL BENZENE (CAS TOLUENE (CAS 108-88- XYLENE (CAS 1330-20- Clean Air Act (CAA) Section BUTANE (CAS 106-97-8 PROPANE (CAS 74-98-6	100-41-4) -3) 7) • 112(r) Accidental Release)		68.130)
Safe Drinking Water Act (SDWA)	Not regulated.		
Drug Enforcement Adm Chemical Code Numbe		sential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and
ACETONE (CAS 67		6532	
TOLUENE (CAS 108		6594	
-		•	Mixtures (21 CFR 1310.12(c))
ACETONE (CAS 67		35 %WV	
TOLUENE (CAS 108 DEA Exempt Chemical		35 %WV	
•		6500	
ACETONE (CAS 67 TOLUENE (CAS 108		6532 594	
US state regulations	,		
US - California Candidate C	hemicals: Listed		
ACETONE (CAS 67-64-1 AROMATIC HYDROCAF BUTANE (CAS 106-97-8 TALC (CAS 14807-96-6) TITANIUM DIOXIDE (CA	RBON (CAS 64742-94-5))		
US - California Candidate C		ist	
AROMATIC HYDROCAF ETHYL BENZENE (CAS TOLUENE (CAS 108-88- XYLENE (CAS 1330-20-	100-41-4) 3)		
US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)			
Not listed.			
US. Massachusetts RTK - S	ubstance List		
ACETONE (CAS 67-64-1			
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ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) PROPANE (CAS 74-98-6) TALC (CAS 14807-96-6) TITANIUM DIOXIDE (CAS 13463-67-7) **TOLUENE (CAS 108-88-3)** XYLENE (CAS 1330-20-7) ZINC OXIDE (CAS 1314-13-2) US. New Jersey Worker and Community Right-to-Know Act ACETONE (CAS 67-64-1) AROMATIC HYDROCARBON (CAS 64742-94-5) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) **PROPANE (CAS 74-98-6)** TALC (CAS 14807-96-6) TITANIUM DIOXIDE (CAS 13463-67-7) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) ZINC OXIDE (CAS 1314-13-2) ZINC PHOSPHATE (CAS 7779-90-0) US. Pennsylvania Worker and Community Right-to-Know Law

ACETONE (CAS 67-64-1) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) **PROPANE (CAS 74-98-6)** TALC (CAS 14807-96-6) TITANIUM DIOXIDE (CAS 13463-67-7) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) ZINC OXIDE (CAS 1314-13-2)

BUTANE (CAS 106-97-8)

US. Rhode Island RTK

ACETONE (CAS 67-64-1) BUTANE (CAS 106-97-8) ETHYL BENZENE (CAS 100-41-4) n-BUTYL ALCOHOL (CAS 71-36-3) PROPANE (CAS 74-98-6) TOLUENE (CAS 108-88-3) XYLENE (CAS 1330-20-7) ZINC OXIDE (CAS 1314-13-2) ZINC PHOSPHATE (CAS 7779-90-0)

US. California Proposition 65

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

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

BENZENE (CAS 71-43-2) CARBON BLACK (CAS 1333-86-4) CRYSTALLINE QUARTZ SILICA (CAS 14808-60-7) CUMENE (CAS 98-82-8)	Listed: February 27, 1987 Listed: February 21, 2003 Listed: October 1, 1988 Listed: April 6, 2010		
ETHYL BENZENE (CAS 100-41-4)	Listed: June 11, 2004		
FORMALDEHYDE (CAS 50-00-0)	Listed: January 1, 1988		
NAPHTHALENE (CAS 91-20-3)	Listed: April 19, 2002		
TITANIUM DIOXIDE (CAS 13463-67-7)	Listed: September 2, 2011		
US - California Proposition 65 - CRT: Listed date/Deve	elopmental toxin		
BENZENE (CAS 71-43-2)	Listed: December 26, 1997		
TOLUENE (CAS 108-88-3)	Listed: January 1, 1991		
US - California Proposition 65 - CRT: Listed date/Female reproductive toxin			
TOLUENE (CAS 108-88-3)	Listed: August 7, 2009		
US - California Proposition 65 - CRT: Listed date/Male reproductive toxin			
BENZENE (CAS 71-43-2)	Listed: December 26, 1997		

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	06-12-2016
Version #	01
HMIS® ratings	Health: 2* Flammability: 4 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 4 Instability: 0
NFPA ratings	2 0
Disclaimer	The information and recommendations in this

Disclaimer

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, expressed or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.