



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name STEEL-IT 2203 Sinco Alkyd Primer
Version # 01
Issue date 06-21-2012
Revision date -
Supersedes date -
CAS # Mixture
Product code 2203
Product use Paint / Industrial coating.
Manufacturer/Supplier Stainless Steel Coatings, Inc
835 Sterling Road
South Lancaster, MA, 01561
sds@steel-it.com
(978) 365-9828
Emergency CHEMTREC, 1-800-424-9300

2. Hazards Identification

Physical state Liquid.
Appearance Red liquid.
Emergency overview DANGER!
Extremely flammable liquid. Harmful if inhaled or absorbed through skin. Causes skin, eye and respiratory tract irritation. Cancer hazard - can cause cancer. Causes CNS effects. May cause allergic skin reaction.
OSHA regulatory status This product is hazardous according to OSHA 29 CFR 1910.1200.
Potential health effects
Routes of exposure Inhalation. Ingestion. Eye contact. Skin contact.
Eyes Causes eye irritation.
Skin Causes skin irritation.
Inhalation Causes respiratory tract irritation. Overexposure to mists/vapors of this product may cause headache, dizziness, nausea, and respiratory tract irritation.
Ingestion May cause discomfort if swallowed.
Target organs Kidneys. Central nervous system Reproductive system.
Chronic effects Possible reproductive hazard that may cause adverse reproductive effects based on animal data. Mutagen - may cause inheritable genetic damage. Exposure over a long period of time may cause central nervous system effects.
Signs and symptoms Sensitization. Skin irritation. Drowsiness and dizziness.
Potential environmental effects Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Iron oxide	1309-37-1	10-20
Ligroine	8032-32-4	10-20
Talc	14807-96-6	10-20
Toluene	108-88-3	5-10
Zinc oxide	1314-13-2	5-10
Barium sulphate	7727-43-7	2-5
Chromium	7440-47-3	2-5

Components	CAS #	Percent
Ethylbenzene	100-41-4	2-5
P-xylene	106-42-3	2-5
Trizinc bis(orthophosphate)	7779-90-0	2-5
4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene	98-56-6	1-2
Distillates (petroleum), hydrotreated light	64742-47-8	1-2
Nickel	7440-02-0	1-2
O-xylene	95-47-6	1-2
Xylene	1330-20-7	1-2
Octanoic acid, cobalt salt	6700-85-2	<1

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids wide apart. Get medical attention immediately.

Skin contact Wash area with soap and water. Get medical attention if irritation develops or persists.

Inhalation If symptomatic, move to fresh air. Get medical attention if symptoms persist.

Ingestion Get medical attention if any discomfort occurs.

Notes to physician Treat symptomatically.

General advice No specific first aid measures noted.

5. Fire Fighting Measures

Flammable properties Extremely flammable liquid and vapor - vapor may cause flash fire. Material will float and may ignite on surface of water. Containers may explode when heated.

Extinguishing media

Suitable extinguishing media Carbon dioxide (CO₂). Foam. Dry chemical. Water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters

Specific hazards arising from the chemical Vapors may form explosive mixtures with air.

Protective equipment and precautions for firefighters Self-contained breathing apparatus.

Fire fighting equipment/instructions Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Hazardous combustion products During fire, gases hazardous to health may be formed.

6. Accidental Release Measures

Personal precautions Eliminate all sources of ignition. Ensure adequate ventilation. Wear suitable protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.

Environmental precautions Prevent entry into waterways, sewer, basements or confined areas.

Methods for containment Eliminate all ignition sources. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Liquid Spills: Absorb up with sand or other non-combustible absorbent material.

Never return spills in original containers for re-use. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

7. Handling and Storage

Handling

Wear personal protective equipment. The product is extremely flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. Use only non-sparking tools. Use only with adequate ventilation. Vapors are heavier than air and may spread along floors. Pregnant women should not work with the product, if there is the least risk of exposure. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid inhalation of vapors and contact with skin and eyes.

Storage

Store locked up. Keep container tightly closed and in a well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Store in closed original container at room temperature. Store away from incompatible materials.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	10 mg/m ³	
Chromium (CAS 7440-47-3)	TWA	0.5 mg/m ³	
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm	
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m ³	Respirable fraction.
Nickel (CAS 7440-02-0)	TWA	1.5 mg/m ³	Inhalable fraction.
Octanoic acid, cobalt salt (CAS 6700-85-2)	TWA	0.02 mg/m ³	
O-xylene (CAS 95-47-6)	STEL	150 ppm	
	TWA	100 ppm	
P-xylene (CAS 106-42-3)	STEL	150 ppm	
	TWA	100 ppm	
Talc (CAS 14807-96-6)	TWA	2 mg/m ³	Respirable fraction.
Toluene (CAS 108-88-3)	TWA	20 ppm	
Xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m ³	Respirable fraction.
	TWA	2 mg/m ³	Respirable fraction.

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

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Chromium (CAS 7440-47-3)	PEL	1 mg/m ³	
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m ³	
		100 ppm	
Iron oxide (CAS 1309-37-1)	PEL	10 mg/m ³	Fume.
Nickel (CAS 7440-02-0)	PEL	1 mg/m ³	
O-xylene (CAS 95-47-6)	PEL	435 mg/m ³	
		100 ppm	
P-xylene (CAS 106-42-3)	PEL	435 mg/m ³	
		100 ppm	
Xylene (CAS 1330-20-7)	PEL	435 mg/m ³	
		100 ppm	
Zinc oxide (CAS 1314-13-2)	PEL	5 mg/m ³	Respirable fraction.

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

Components	Type	Value	Form
		5 mg/m3	Fume.
		15 mg/m3	Total dust.

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value	
Toluene (CAS 108-88-3)	Ceiling	300 ppm	
	TWA	200 ppm	

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Talc (CAS 14807-96-6)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	10 mg/m3	
Chromium (CAS 7440-47-3)	TWA	0.5 mg/m3	
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	TWA	200 mg/m3	Vapor.
Ethylbenzene (CAS 100-41-4)	STEL	543 mg/m3	
	TWA	125 ppm	
		434 mg/m3	
		100 ppm	
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable.
Ligroine (CAS 8032-32-4)	TWA	1400 mg/m3	
		300 ppm	
Nickel (CAS 7440-02-0)	TWA	1.5 mg/m3	
Octanoic acid, cobalt salt (CAS 6700-85-2)	TWA	0.02 mg/m3	
O-xylene (CAS 95-47-6)	STEL	651 mg/m3	
	TWA	150 ppm	
		434 mg/m3	
		100 ppm	
P-xylene (CAS 106-42-3)	STEL	651 mg/m3	
	TWA	150 ppm	
		434 mg/m3	
		100 ppm	
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable particles.
Toluene (CAS 108-88-3)	TWA	188 mg/m3	
		50 ppm	
Xylene (CAS 1330-20-7)	STEL	651 mg/m3	
	TWA	150 ppm	
		434 mg/m3	
		100 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable.
	TWA	2 mg/m3	Respirable.

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Chromium (CAS 7440-47-3)	TWA	0.5 mg/m3	
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	TWA	200 mg/m3	Non-aerosol.
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm	
Iron oxide (CAS 1309-37-1)	STEL TWA	10 mg/m3	Fume.
		5 mg/m3	Dust.
		5 mg/m3	Fume.
		3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.
Nickel (CAS 7440-02-0)	TWA	0.05 mg/m3	
Octanoic acid, cobalt salt (CAS 6700-85-2)	TWA	0.02 mg/m3	
O-xylene (CAS 95-47-6)	STEL TWA	150 ppm	
		100 ppm	
		100 ppm	
P-xylene (CAS 106-42-3)	STEL TWA	150 ppm	
		100 ppm	
		100 ppm	
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.
Toluene (CAS 108-88-3)	TWA	20 ppm	
Xylene (CAS 1330-20-7)	STEL TWA	150 ppm	
		100 ppm	
Zinc oxide (CAS 1314-13-2)	STEL TWA	10 mg/m3	Respirable.
		2 mg/m3	Respirable.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	10 mg/m3	
Chromium (CAS 7440-47-3)	TWA	0.5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL TWA	125 ppm	
		100 ppm	
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
Ligroine (CAS 8032-32-4)	TWA	525 mg/m3	
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	Inhalable
Octanoic acid, cobalt salt (CAS 6700-85-2)	TWA	0.02 mg/m3	
O-xylene (CAS 95-47-6)	STEL TWA	150 ppm	
		100 ppm	
P-xylene (CAS 106-42-3)	STEL TWA	150 ppm	
		100 ppm	
Talc (CAS 14807-96-6)	TWA	2 fibers/ml	
		2 mg/m3	Respirable particles.
Toluene (CAS 108-88-3)	TWA	20 ppm	
Xylene (CAS 1330-20-7)	STEL TWA	150 ppm	
		100 ppm	
Zinc oxide (CAS 1314-13-2)	STEL TWA	10 mg/m3	Respirable fraction.
		2 mg/m3	Respirable fraction.

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	5 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
Chromium (CAS 7440-47-3)	TWA	0.5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	543 mg/m3	

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
		125 ppm	
	TWA	434 mg/m3	
		100 ppm	
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.
		10 mg/m3	Total dust.
Ligroine (CAS 8032-32-4)	TWA	1370 mg/m3	
		300 ppm	
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	
Octanoic acid, cobalt salt (CAS 6700-85-2)	TWA	0.02 mg/m3	
O-xylene (CAS 95-47-6)	STEL	651 mg/m3	
		150 ppm	
	TWA	434 mg/m3	
		100 ppm	
P-xylene (CAS 106-42-3)	STEL	651 mg/m3	
		150 ppm	
	TWA	434 mg/m3	
		100 ppm	
Talc (CAS 14807-96-6)	TWA	3 mg/m3	Respirable dust.
Toluene (CAS 108-88-3)	TWA	188 mg/m3	
		50 ppm	
Xylene (CAS 1330-20-7)	STEL	651 mg/m3	
		150 ppm	
	TWA	434 mg/m3	
		100 ppm	
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.
		10 mg/m3	Total dust.

Mexico. Occupational Exposure Limit Values

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	0.5 mg/m3	
Chromium (CAS 7440-47-3)	TWA	0.5 mg/m3	
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3	
		125 ppm	
	TWA	435 mg/m3	
		100 ppm	
Iron oxide (CAS 1309-37-1)	STEL	10 mg/m3	
	TWA	5 mg/m3	
Ligroine (CAS 8032-32-4)	STEL	1800 mg/m3	
		400 ppm	
	TWA	1350 mg/m3	
		300 ppm	
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	
O-xylene (CAS 95-47-6)	STEL	655 mg/m3	
		150 ppm	
	TWA	435 mg/m3	
		100 ppm	
P-xylene (CAS 106-42-3)	STEL	655 mg/m3	
		150 ppm	
	TWA	435 mg/m3	
		100 ppm	
Talc (CAS 14807-96-6)	TWA	2 fibers/cm3	
Toluene (CAS 108-88-3)	TWA	188 mg/m3	
		50 ppm	
Xylene (CAS 1330-20-7)	STEL	655 mg/m3	

Mexico. Occupational Exposure Limit Values

Components	Type	Value	Form
Zinc oxide (CAS 1314-13-2)	TWA	150 ppm	
		435 mg/m ³	
		100 ppm	
	STEL	10 mg/m ³	Fume.
	TWA	5 mg/m ³	Fume.
		10 mg/m ³	Dust.
Engineering controls	Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.		
Personal protective equipment			
Eye / face protection	Use approved safety goggles or face shield.		
Skin protection	Wear appropriate chemical resistant clothing to prevent any possibility of skin contact. Nitrile chemical resistant gloves are recommended. Suitable gloves can be recommended by the glove supplier.		
Respiratory protection	Wear appropriate NIOSH respirator when ventilation is inadequate and occupational exposure limits are exceeded.		
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

9. Physical & Chemical Properties

Appearance	Red liquid.
Physical state	Liquid.
Form	Liquid.
Color	Red.
Odor	Characteristic of solvents.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	Not available.
Vapor density	> 1
Boiling point	275 - 412 °F (135 - 211.1 °C)
Melting point/Freezing point	Not available.
Solubility (water)	Moderate soluble in water.
Specific gravity	1.426 (77°F)
Flash point	40 °F (4.4 °C) Closed Cup
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	0.9 %
Auto-ignition temperature	Not available.
VOC	473 g/l Test method: Product Formulation Data

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Heat, sparks, flames. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon dioxide. Carbon oxides.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 5.28 mg/l, 4 hours
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
Ethylbenzene (CAS 100-41-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	18156 mg/kg
<i>Inhalation</i>		
LC50	Rat	55000 mg/m ³
<i>Oral</i>		
LD50	Rat	3500 mg/kg
Ligroine (CAS 8032-32-4)		
Acute		
<i>Inhalation</i>		
LC50	Rat	3400 mg/l, 4 Hours
<i>Other</i>		
LD50	Mouse	40 mg/kg
O-xylene (CAS 95-47-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 43 g/kg
<i>Inhalation</i>		
LC50	Rat	6350 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	4300 mg/kg
P-xylene (CAS 106-42-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 43 g/kg
<i>Oral</i>		
LD50	Rat	3523 - 8600 mg/kg
Toluene (CAS 108-88-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	14.1 ml/kg
<i>Inhalation</i>		
LC50	Rat	49000 mg/m ³ , 4 Hours
<i>Oral</i>		
LD50	Rat	636 mg/kg
Xylene (CAS 1330-20-7)		
Acute		
<i>Oral</i>		
LD50	Rat	4300 mg/kg

Components	Species	Test Results
Zinc oxide (CAS 1314-13-2)		
Acute		
<i>Oral</i>		
LD50	Rat	> 5 g/kg
Sensitization	May cause an allergic skin reaction.	
Acute effects	Overexposure to mists/vapors of this product may cause headache, dizziness, nausea, and respiratory tract irritation.	
Carcinogenicity	Cancer hazard - can cause cancer.	
ACGIH Carcinogens		
Barium sulphate (CAS 7727-43-7)		A4 Not classifiable as a human carcinogen.
Chromium (CAS 7440-47-3)		A4 Not classifiable as a human carcinogen.
Ethylbenzene (CAS 100-41-4)		A3 Confirmed animal carcinogen with unknown relevance to humans.
Iron oxide (CAS 1309-37-1)		A4 Not classifiable as a human carcinogen.
Nickel (CAS 7440-02-0)		A5 Not suspected as a human carcinogen.
Octanoic acid, cobalt salt (CAS 6700-85-2)		A3 Confirmed animal carcinogen with unknown relevance to humans.
O-xylene (CAS 95-47-6)		A4 Not classifiable as a human carcinogen.
P-xylene (CAS 106-42-3)		A4 Not classifiable as a human carcinogen.
Talc (CAS 14807-96-6)		A4 Not classifiable as a human carcinogen.
Toluene (CAS 108-88-3)		A4 Not classifiable as a human carcinogen.
Xylene (CAS 1330-20-7)		A4 Not classifiable as a human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity		
Chromium (CAS 7440-47-3)		3 Not classifiable as to carcinogenicity to humans.
Ethylbenzene (CAS 100-41-4)		2B Possibly carcinogenic to humans.
Iron oxide (CAS 1309-37-1)		3 Not classifiable as to carcinogenicity to humans.
Nickel (CAS 7440-02-0)		2B Possibly carcinogenic to humans.
O-xylene (CAS 95-47-6)		3 Not classifiable as to carcinogenicity to humans.
P-xylene (CAS 106-42-3)		3 Not classifiable as to carcinogenicity to humans.
Talc (CAS 14807-96-6)		2B Possibly carcinogenic to humans.
Toluene (CAS 108-88-3)		3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)		3 Not classifiable as to carcinogenicity to humans.
US NTP Report on Carcinogens: Anticipated carcinogen		
Nickel (CAS 7440-02-0)		Reasonably Anticipated to be a Human Carcinogen.
US NTP Report on Carcinogens: Known carcinogen		
Nickel (CAS 7440-02-0)		Known To Be Human Carcinogen.
Mutagenicity	Mutagen - may cause inheritable genetic damage.	
Reproductive effects	Possible reproductive hazard that may cause adverse reproductive effects based on animal data.	
Symptoms and target organs	Sensitization. Skin irritation. Headaches, dizziness and nausea.	

12. Ecological Information

Ecotoxicological data

Components	Species	Test Results
Barium sulphate (CAS 7727-43-7)		
Aquatic		
Crustacea	EC50	Tubificid worm (Tubifex tubifex) 28.61 - 38.03 mg/l, 48 hours
Ethylbenzene (CAS 100-41-4)		
Aquatic		
Crustacea	EC50	Daphnia 2.1 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus) 32 - 88 mg/l, 96 hours Fathead minnow (Pimephales promelas) 12.1 mg/l, 96 hours

Components	Species		Test Results
O-xylene (CAS 95-47-6)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	0.78 - 2.51 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	5.59 - 11.6 mg/l, 96 hours
P-xylene (CAS 106-42-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	3.55 - 6.31 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.6 mg/l, 96 hours
Toluene (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	5.5 mg/l, 96 hours
Trizinc bis(orthophosphate) (CAS 7779-90-0)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.09 mg/l, 96 hours
Xylene (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8 mg/l, 96 Hours
Zinc oxide (CAS 1314-13-2)			
Aquatic			
Crustacea	LC50	Water flea (Daphnia magna)	0.098 mg/l, 48 Hours
Persistence and degradability	No data available.		
Bioaccumulation / Accumulation	No data available.		
Partition coefficient			
Toluene		2.73	
O-xylene		3.12	
P-xylene		3.15	
Ethylbenzene		3.15	
Xylene		3.2	
Mobility in environmental media	No data available.		

13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 °F
Disposal instructions	Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.
Waste from residues / unused products	Dispose of waste and residues in accordance with local authority requirements.
Contaminated packaging	Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT

Basic shipping requirements:

UN number UN1263

Proper shipping name Paint, MARINE POLLUTANT
Hazard class 3
Packing group III
Environmental hazards
 Marine pollutant Yes
Special precautions Read safety instructions, MSDS and emergency procedures before handling.
Additional information:
Special provisions B1, B52, IB3, T2, TP1, TP29
Packaging exceptions 150
Packaging non bulk 173
Packaging bulk 242

IATA

UN number UN1263
UN proper shipping name Paint
Transport hazard class(es) 3
Packing group III
Environmental hazards Yes
ERG code 3L
Special precautions for user Read safety instructions, MSDS and emergency procedures before handling.

IMDG

UN number UN1263
UN proper shipping name PAINT, MARINE POLLUTANT
Transport hazard class(es) 3
Packing group III
Environmental hazards
 Marine pollutant Yes
EmS F-E, S-E

TDG

Proper shipping name PAINT
Hazard class 3
UN number UN1263
Packing group III
Marine pollutant D
Special provisions 59, 83

General Read safety instructions, MSDS and emergency procedures before handling.

15. Regulatory Information

US federal regulations This product is hazardous according to OSHA 29 CFR 1910.1200.
 All components are on the U.S. EPA TSCA Inventory List.

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

4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene (CAS 98-56-6) 1.0 % One-Time Export Notification only.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Chromium (CAS 7440-47-3)
 Ethylbenzene (CAS 100-41-4)
 Nickel (CAS 7440-02-0)
 Octanoic acid, cobalt salt (CAS 6700-85-2)
 O-xylene (CAS 95-47-6)
 P-xylene (CAS 106-42-3)
 Toluene (CAS 108-88-3)
 Xylene (CAS 1330-20-7)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Chromium (CAS 7440-47-3)	1.0 %
Ethylbenzene (CAS 100-41-4)	0.1 %
Nickel (CAS 7440-02-0)	0.1 %
O-xylene (CAS 95-47-6)	1.0 %
P-xylene (CAS 106-42-3)	1.0 %
Toluene (CAS 108-88-3)	1.0 %

Trizinc bis(orthophosphate) (CAS 7779-90-0)	1.0 % N982
Xylene (CAS 1330-20-7)	1.0 %
Zinc oxide (CAS 1314-13-2)	1.0 % N982

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Chromium (CAS 7440-47-3)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Nickel (CAS 7440-02-0)	Listed.
O-xylene (CAS 95-47-6)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Toluene (CAS 108-88-3)	Listed.
Trizinc bis(orthophosphate) (CAS 7779-90-0)	N982 Listed.
Xylene (CAS 1330-20-7)	Listed.
Zinc oxide (CAS 1314-13-2)	N982 Listed.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

Toluene: 1000
 Barium sulphate: 1000
 Chromium: 5000
 Ethylbenzene: 1000
 P-xylene: 100
 Nickel: 100
 O-xylene: 1000
 Xylene: 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
 Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A)
 No

Section 311/312 (40 CFR 370)
 Yes

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)
 Not controlled

Canadian regulations
 This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status
 Controlled

WHMIS classification
 B2 - Flammable Liquids
 D1B - Immediate/Serious-TOXIC
 D2A - Other Toxic Effects-VERY TOXIC
 D2B - Other Toxic Effects-TOXIC

WHMIS labeling



Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

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

US - California Hazardous Substances (Director's): Listed substance

Barium sulphate (CAS 7727-43-7)	Listed.
Chromium (CAS 7440-47-3)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Iron oxide (CAS 1309-37-1)	Listed.
Nickel (CAS 7440-02-0)	Listed.
Octanoic acid, cobalt salt (CAS 6700-85-2)	Listed.
O-xylene (CAS 95-47-6)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Talc (CAS 14807-96-6)	Listed.
Toluene (CAS 108-88-3)	Listed.
Trizinc bis(orthophosphate) (CAS 7779-90-0)	Listed.
Xylene (CAS 1330-20-7)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Ethylbenzene (CAS 100-41-4)	Listed.
Nickel (CAS 7440-02-0)	Listed.
SODIUM BICHROMATE (CAS 10588-01-9)	Listed.
Toluene (CAS 108-88-3)	Listed.

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

Ethylbenzene (CAS 100-41-4)	Listed: June 11, 2004 Carcinogenic.
Nickel (CAS 7440-02-0)	Listed: October 1, 1989 Carcinogenic.
SODIUM BICHROMATE (CAS 10588-01-9)	Listed: February 27, 1987 Carcinogenic.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

SODIUM BICHROMATE (CAS 10588-01-9)	Listed: December 19, 2008 Developmental toxin.
Toluene (CAS 108-88-3)	Listed: January 1, 1991 Developmental toxin.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

SODIUM BICHROMATE (CAS 10588-01-9)	Listed: December 19, 2008 Female reproductive toxin.
Toluene (CAS 108-88-3)	Listed: August 7, 2009 Female reproductive toxin.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

SODIUM BICHROMATE (CAS 10588-01-9)	Listed: December 19, 2008 Male reproductive toxin.
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US - New Jersey RTK - Substances: Listed substance

4-Chloro-.alpha.,.alpha.,.alpha.-trifluorotoluene (CAS 98-56-6)	Listed.
Barium sulphate (CAS 7727-43-7)	Listed.
Chromium (CAS 7440-47-3)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Iron oxide (CAS 1309-37-1)	Listed.
Ligroine (CAS 8032-32-4)	Listed.
Nickel (CAS 7440-02-0)	Listed.
Octanoic acid, cobalt salt (CAS 6700-85-2)	Listed.
O-xylene (CAS 95-47-6)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Talc (CAS 14807-96-6)	Listed.
Toluene (CAS 108-88-3)	Listed.
Trizinc bis(orthophosphate) (CAS 7779-90-0)	Listed.
Xylene (CAS 1330-20-7)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.

US - Pennsylvania RTK - Hazardous Substances: All compounds of this substance are considered environmental hazards

Chromium (CAS 7440-47-3)	LISTED
Nickel (CAS 7440-02-0)	LISTED

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Chromium (CAS 7440-47-3)	Special hazard.
Nickel (CAS 7440-02-0)	Special hazard.

US. Massachusetts RTK - Substance List

Barium sulphate (CAS 7727-43-7)	Listed.
Chromium (CAS 7440-47-3)	Listed.
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Iron oxide (CAS 1309-37-1)	Listed.
Nickel (CAS 7440-02-0)	Listed.
O-xylene (CAS 95-47-6)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Talc (CAS 14807-96-6)	Listed.
Toluene (CAS 108-88-3)	Listed.
Xylene (CAS 1330-20-7)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.

US. New Jersey Worker and Community Right-to-Know Act

Chromium (CAS 7440-47-3)	500 LBS
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	10000 LBS
Ethylbenzene (CAS 100-41-4)	500 LBS
Nickel (CAS 7440-02-0)	500 LBS
Octanoic acid, cobalt salt (CAS 6700-85-2)	500 LBS
O-xylene (CAS 95-47-6)	500 LBS
P-xylene (CAS 106-42-3)	500 LBS
Toluene (CAS 108-88-3)	500 LBS
Trizinc bis(orthophosphate) (CAS 7779-90-0)	500 LBS
Xylene (CAS 1330-20-7)	500 LBS
Zinc oxide (CAS 1314-13-2)	500 LBS

US. Pennsylvania RTK - Hazardous Substances

Barium sulphate (CAS 7727-43-7)	Listed.
Chromium (CAS 7440-47-3)	Listed.
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Iron oxide (CAS 1309-37-1)	Listed.
Ligroine (CAS 8032-32-4)	Listed.
Nickel (CAS 7440-02-0)	Listed.
O-xylene (CAS 95-47-6)	Listed.
P-xylene (CAS 106-42-3)	Listed.
Talc (CAS 14807-96-6)	Listed.
Toluene (CAS 108-88-3)	Listed.
Xylene (CAS 1330-20-7)	Listed.
Zinc oxide (CAS 1314-13-2)	Listed.

16. Other Information**Recommended use** Paint / Industrial coating.**HMIS® ratings** Health: 2*
Flammability: 3
Physical hazard: 0**NFPA ratings** Health: 2
Flammability: 3
Instability: 0**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently available.