# SAFETY DATA SHEET

Issuing Date 28-Oct-2016 Revision Date 28-Oct-2016 **Revision Number** 0

This document complies with the US OSHA Hazard Communication Standard (29 CFR 1910.1200), Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR), and Mexico's NMX-R-019-SC-2011.

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

**GHS** product identifier

**Product Name** Hi Temperature 44 All colors

Other means of identification

**Part Number** 44219 (White), 44424 (Yellow), 44250 (Black), 44266 (Green), 44094 (Blue)

**Formula Code** Z219 (White), Z424 (Yellow), ER250 (Black), ER266 (Green), A094M (Blue)

UN1263 **UN-Number** 

**Synonyms** None

Recommended use of the chemical and restrictions on use

**Recommended Use** Solvent based marker

Uses advised against No information available

Supplier's details

**Initial Supplier Supplier Address** ITW Permatex Canada ITW PRO BRANDS 1-35 Brownridge Road 805 E. Old 56 Highway Halton Hills, ON, L7G 0C6 Olathe, KS 66061

Canada TEL: 1-800-443-9536

**Emergency telephone number** 

800-535-5053 Infotrac **Emergency Telephone** 

Number

## 2. HAZARDS IDENTIFICATION

#### Classification

This product is considered hazardous according to the criteria set within the US OSHA Hazard Communication Standard (29 CFR 1910.1200), Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR), and Mexico's NMX-R-019-SC-2011.

Acute Oral Toxicity	Category 4
Acute Inhalation Toxicity - Vapors	Category 4

Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1B
Reproductive Toxicity	Category 1A
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3
Specific Target Organ Toxicity (Repeated Exposure)	Category 1
Aspiration Toxicity	Category 1
Flammable liquids	Category 3

### **Label Elements**

## **Danger**



#### **Hazard Statements**

Harmful if swallowed Harmful if inhaled Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction May cause genetic defects May cause cancer May damage fertility or the unborn child

May cause respiratory irritation

Causes damage to organs through prolonged or repeated exposure

May be fatal if swallowed and enters airways

Flammable liquid and vapor.

### Physical and Health Hazards Not Otherwise Classified

Not applicable.

## **Precautionary Statements**

#### Prevention

- · Use only outdoors or in a well-ventilated area.
- · Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- · Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Contaminated work clothing should not be allowed out of the workplace.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- 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.
- Wear protective gloves/protective clothing/eye protection/face protection.

#### **General Advice**

- If exposed or concerned: Get medical attention/advice
- Specific treatment (see supplemental first aid instructions on this label)

#### Eyes

- 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.

#### Skin

- If skin irritation or rash occurs: Get medical advice/attention.
- · Wash contaminated clothing before reuse.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

#### Inhalation

• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

#### Ingestion

- · Rinse mouth.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- · Do NOT induce vomiting.

#### Fire

• In case of fire: Use CO2, dry chemical, or foam for extinction.

#### Storage

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

#### Disposal

• Dispose of contents/container to an approved waste disposal plant.

### Other information

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

32.76865% of the mixture consists of ingredient(s) of unknown toxicity.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Petroleum naphtha, light aromatic	64742-95-6	35.51		-
1,2,4 Trimethylbenzene	95-63-6	29.51	-	-
Chromium (III) oxide	1308-38-9	25.82	-	-
Chemical Frits (Lead free)	65997-18-4	21.04	-	-
Chrome yellow (Lead chromate pigment)	1344-37-2	17.44	-	-
Xylene, mixed isomers	1330-20-7	17	-	-
Titanium dioxide	13463-67-7	16.03	-	-
Ethylbenzene	100-41-4	7.01	-	-
1,3,5-Trimethylbenzene	108-67-8	5.9	-	-
Carbon black	1333-86-4	4.56	-	-
Quartz	14808-60-7	3.85	-	-
Cumene	98-82-8	2.95	-	-
Silicon dioxide	7631-86-9	1.76	-	-
Stoddard solvent	8052-41-3	1.68	-	-
2-Ethylhexanoic acid	149-57-5	0.56	-	-
Toluene	108-88-3	0.23	-	-

## 4. FIRST AID MEASURES

**Description of necessary first-aid measures** 

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while

rinsing. If symptoms persist, call a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. In the case of skin irritation or allergic reactions see a physician.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious

person. Drink plenty of water. Aspiration hazard if swallowed - can enter lungs and cause

damage. Consult a physician if necessary.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Eye irritation/reactions. Skin irritation. Respiratory irritation. May cause allergic skin

reaction. Itching. Rashes. Aspiration may cause pulmonary edema and pneumonitis.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

<u>Suitable Extinguishing Media</u> Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical.

<u>Unsuitable Extinguishing Media</u> No information available.

Specific Hazards Arising from the

Chemical

May cause sensitization by skin contact. Thermal decomposition can lead to release of irritating gases and vapors. Risk of ignition. Vapors may travel to source of ignition and

och book

flash back.

**Explosion Data** 

Sensitivity to Mechanical Impact Sensitivity to Static Discharge None. Yes.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Evacuate personnel to safe areas. Use personal protective equipment. Ensure adequate

ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Take

precautionary measures against static discharges.

**Environmental Precautions** 

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do

not flush into surface water or sanitary sewer system. Avoid release to the environment.

See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

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

Methods for Cleaning Up Small spillage: Use a non-combustible material like vermiculite, sand or earth to soak up

the product and place into a container for later disposal. Large spillage: Pump or vacuum

NIOSH IDLH

transfer spilled product to clean containers for recovery. Absorb unrecoverable product.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Handling

Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. Ensure adequate ventilation. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

### Conditions for safe storage, including any incompatibilities

**Storage** Keep away from open flames, hot surfaces and sources of ignition. Keep containers tightly

closed in a cool, well-ventilated place. Keep out of the reach of children. Keep container

**OSHA PEL** 

closed when not in use. Keep away from incompatible materials.

Incompatible Products Strong oxidizing agents. Strong acids. Strong reducing agents. Strong alkalis.

**ACGIH TLV** 

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### **Control parameters**

### **Exposure Guidelines**

Chemical Name

Chemical Name	ACGIH ILV	USHA PEL	NIOSH IDLH
1,2,4 Trimethylbenzene	TWA: 25 ppm	(vacated) TWA: 25 ppm	TWA: 25 ppm
95-63-6		(vacated) TWA: 125 mg/m <sup>3</sup>	TWA: 125 mg/m <sup>3</sup>
Chromium (III) oxide	TWA: 0.5 mg/m <sup>3</sup> Cr	TWA: 0.5 mg/m <sup>3</sup> Cr	IDLH: 25 mg/m <sup>3</sup> Cr(III)
1308-38-9		(vacated) TWA: 0.5 mg/m³ Cr	TWA: 0.5 mg/m <sup>3</sup> Cr
Chemical Frits (Lead free) 65997-18-4	STEL: 10 mg/m³ Zr TWA: 5 mg/m³ Zr	TWA: 5 mg/m³ Zr (vacated) TWA: 5 mg/m³ Zr	IDLH: 5 mg/m <sup>3</sup> As IDLH: 9 mg/m <sup>3</sup> Cd dust and fume IDLH: 50
	TWA: 0.2 mg/m <sup>3</sup> Mn	(vacated) STEL: 10 mg/m³ Zr	mg/m <sup>3</sup> Sb IDLH: 100 mg/m <sup>3</sup> Cu
	3	(vacated) Ceiling: 5 mg/m <sup>3</sup>	dust and mist IDLH: 500 mg/m <sup>3</sup>
		Ceiling: 5 mg/m³ Mn	Mn IDLH: 25 mg/m <sup>3</sup> Zr IDLH: 100
			mg/m³ Pb IDLH: 10 mg/m³ Ni
			Ceiling: 0.002 mg/m <sup>3</sup> As 15 min
			Ceiling: 0.05 mg/m <sup>3</sup> V dust and
			fume 15 min
			TWA: 0.5 mg/m <sup>3</sup> Sb TWA: 1
			mg/m³ Cu dust and mist TWA: 1
			mg/m <sup>3</sup> Mn TWA: 5 mg/m <sup>3</sup> except
			Zirconium tetrachloride Zr TWA:
			0.050 mg/m³ Pb TWA: 0.015
			mg/m³ except Nickel carbonyl Ni
			STEL: 3 mg/m³ Mn STEL: 10
			mg/m³ Zr
Chrome yellow (Lead chromate pigment)	TWA: 0.05 mg/m <sup>3</sup> Pb	TWA: 5 μg/m³ TWA: 50 μg/m³ Pb	IDLH: 100 mg/m <sup>3</sup> Pb
1344-37-2		Action Level: 2.5 µg/m³ Cr Action	TWA: 0.0002 mg/m³ Cr TWA:
		Level: 30 µg/m³ Pb Poison;See	0.050 mg/m <sup>3</sup> Pb
		29 CFR 1910.1025	
Xylene, mixed isomers	STEL: 150 ppm	TWA: 100 ppm	-
1330-20-7	TWA: 100 ppm	TWA: 435 mg/m <sup>3</sup>	
		(vacated) TWA: 100 ppm	
		(vacated) TWA: 435 mg/m <sup>3</sup>	
		(vacated) STEL: 150 ppm	
		(vacated) STEL: 655 mg/m <sup>3</sup>	15111 / 0
Titanium dioxide	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m³ total dust	IDLH: 5000 mg/m <sup>3</sup>
13463-67-7		(vacated) TWA: 10 mg/m³ total	
5	T1444 00	dust	IBILI DOD
Ethylbenzene	TWA: 20 ppm	TWA: 100 ppm	IDLH: 800 ppm
100-41-4		TWA: 435 mg/m <sup>3</sup>	TWA: 100 ppm
		(vacated) TWA: 100 ppm	TWA: 435 mg/m <sup>3</sup>
		(vacated) TWA: 435 mg/m <sup>3</sup>	STEL: 125 ppm
		(vacated) STEL: 125 ppm	STEL: 545 mg/m <sup>3</sup>
		(vacated) STEL: 545 mg/m <sup>3</sup>	

1,3,5-Trimethylbenzene	TWA: 25 ppm	(vacated) TWA: 25 ppm	TWA: 25 ppm
108-67-8		(vacated) TWA: 125 mg/m <sup>3</sup>	TWA: 125 mg/m <sup>3</sup>
Carbon black	TWA: 3 mg/m³ inhalable	TWA: 3.5 mg/m <sup>3</sup>	IDLH: 1750 mg/m <sup>3</sup>
1333-86-4	particulate matter	(vacated) TWA: 3.5 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup>
			TWA: 0.1 mg/m³ Carbon black in
			presence of Polycyclic aromatic
			hydrocarbons PAH
Quartz	TWA: 0.025 mg/m³ respirable	30/(%SiO2+2) mg/m³ TWA, Total	IDLH: 50 mg/m³ respirable dust
14808-60-7	particulate matter	Dust;250/%SiO2+5) mppcf TWA,	TWA: 0.05 mg/m³ respirable dust
		respirable fraction; 10/(%SiO2+2)	
		mg/m³ TWA, respirable	
		TWA: 0.1 mg/m³ (vacated)	
Cumene	TWA: 50 ppm	TWA: 50 ppm	IDLH: 900 ppm
98-82-8		TWA: 245 mg/m <sup>3</sup>	TWA: 50 ppm
		(vacated) TWA: 50 ppm	TWA: 245 mg/m <sup>3</sup>
		(vacated) TWA: 245 mg/m <sup>3</sup>	
		(vacated) S*	
		S*	
Silicon dioxide	10 mg/m <sup>3</sup>	20 mppcf TWA; ((80)/(% SiO2)	IDLH: 3000 mg/m <sup>3</sup>
7631-86-9		mg/m³)	TWA: 6 mg/m <sup>3</sup>
Stoddard solvent	TWA: 100 ppm	TWA: 500 ppm	IDLH: 20000 mg/m <sup>3</sup>
8052-41-3		TWA: 2900 mg/m <sup>3</sup>	Ceiling: 1800 mg/m³ 15 min
		(vacated) TWA: 100 ppm	TWA: 350 mg/m <sup>3</sup>
		(vacated) TWA: 525 mg/m <sup>3</sup>	
Aluminum hydroxide	TWA: 1 mg/m³ respirable	-	-
21645-51-2	particulate matter		
2-Ethylhexanoic acid	TWA: 5 mg/m³ inhalable fraction	-	-
149-57-5	and vapor		
Toluene	TWA: 20 ppm	TWA: 200 ppm	IDLH: 500 ppm
108-88-3		(vacated) TWA: 100 ppm	TWA: 100 ppm
		(vacated) TWA: 375 mg/m <sup>3</sup>	TWA: 375 mg/m <sup>3</sup>
		(vacated) STEL: 150 ppm	STEL: 150 ppm
		(vacated) STEL: 560 mg/m <sup>3</sup>	STEL: 560 mg/m <sup>3</sup>
		Ceiling: 300 ppm	

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

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992).

**Appropriate engineering controls** 

Engineering Measures Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Skin and Body Protection
Respiratory Protection

If splashes are likely to occur, wear: Chemical splash goggles. Risk of contact: Chemical resistant gloves. Boots. Apron.

No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should

be worn.

Hygiene Measures When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area

and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical StateLiquid.AppearanceOpaque, Varies, Thin viscosity,OdorAromatic.Odor ThresholdNo information available.

<u>Property</u> <u>Values</u> <u>Remarks/ - Method</u>

pH No data available None known
Melting Point/Range No data available None known

Boiling Point/Boiling Range158.89-170 °C / 318-338 °FNone knownFlash Point42.22 °C / 108 °FNone knownEvaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone known

Flammability Limits in Air

upper flammability limit 12.6 lower flammability limit 1.9

No data available **Vapor Pressure** None known Vapor Density > 1 (air = 1)None known **Specific Gravity** No data available None known Water Solubility Negligible None known No data available Solubility in other solvents None known Partition coefficient: n-octanol/waterNo data available None known No data available **Autoignition Temperature** None known No data available **Decomposition Temperature** None known **Viscosity** No data available None known

Flammable Properties Flammable; may be ignited by heat, sparks or flames.

**Explosive Properties**No data available **Oxidizing Properties**No data available

Other information

VOC Content (%) ER250 Black: 57.63%

Z219 White: 52.35% A094 Blue: 67.72% Z424 Yellow: 58.69% ER266 Green: 60.99% ER250 Black: 642 g/L

VOC (g/l)

ER250 Black: 642 g/L

Z219 White: 666 g/L

A094 Blue: 719 g/L

Z424 Yellow: 700 g/L

ER266 Green: 695 g/L

## 10. STABILITY AND REACTIVITY

**Reactivity** No data available.

<u>Chemical stability</u> Stable under recommended storage conditions.

Possibility of hazardous reactions None under normal processing.

<u>Hazardous Polymerization</u> Hazardous polymerization does not occur.

<u>Conditions to avoid</u> Heat, flames and sparks. Incompatible products.

Incompatible materials Strong oxidizing agents. Strong acids. Strong reducing agents. Strong alkalis.

<u>Hazardous decomposition products</u> Carbon oxides. Smoke Soot.

## 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

**Product Information** 

**Inhalation** Harmful if inhaled. May cause irritation of respiratory tract. Intentional misuse by

deliberately concentrating and inhaling contents may be harmful or fatal

**Eve Contact** Causes serious eve irritation.

Skin Contact May be harmful in contact with skin. Causes skin irritation.

Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary

edema and pneumonitis.

#### Numerical measures of toxicity - Product

**Unknown acute toxicity** 32.76865% of the mixture consists of ingredient(s) of unknown toxicity.

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

**LD50 Oral** 757 mg/kg; Acute toxicity estimate **LD50 Dermal** 4279 mg/kg; Acute toxicity estimate

Inhalation

dust/mist2.34 mg/L; Acute toxicity estimateVapor15.56 mg/L; Acute toxicity estimate

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Petroleum naphtha, light aromatic	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
1,2,4 Trimethylbenzene	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m <sup>3</sup> (Rat) 4 h
Chromium (III) oxide	> 5000 mg/kg (Rat)	-	-
Chemical Frits (Lead free)	> 2000 mg/kg (Rat)	>2500 mg/kg	-
Chrome yellow (Lead chromate pigment)	> 5000 mg/kg (Rat)	-	-
Xylene, mixed isomers	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit) > 1700 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h
Titanium dioxide	> 10000 mg/kg (Rat)	-	-
Ethylbenzene	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
1,3,5-Trimethylbenzene	= 5000 mg/kg (Rat)	-	= 24 g/m³ (Rat) 4 h
Carbon black	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	=
Quartz	500 mg/kg (Rat)	-	-
Cumene	= 1400 mg/kg (Rat)	= 12300 μL/kg(Rabbit)	= 39000 mg/m <sup>3</sup> (Rat) 4 h > 3577 ppm (Rat) 6 h
Silicon dioxide	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	>2.2 mg/L (Rat) 4 h
Aluminum hydroxide	> 5000 mg/kg (Rat)	-	-
2-Ethylhexanoic acid	= 1600 mg/kg (Rat)	= 1140 mg/kg ( Rabbit )	-
Toluene	>5580 mg/kg (Rat)	8390 mg/kg (Rabbit)	12.5 mg/L ( Rat ) 4 h

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

### Delayed and immediate effects and also chronic effects from short and long term exposure

Respiratory or Skin Sensitization Germ Cell Mutagenicity Carcinogenicity May cause sensitization of susceptible persons. May cause sensitization by skin contact. Contains a known or suspected mutagen. May cause genetic defects.

Contains a known or suspected carcinogen. May cause cancer. The table below indicates

whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Chromium (III) oxide		Group 3		
Chemical Frits (Lead free)	A1	Group 1	Known	Х
	A3	Group 2B	Reasonably Anticipated	
	A2	Group 2A		
Chrome yellow (Lead	A3	Group 1	Known	Χ
chromate pigment)		Group 2A	Reasonably Anticipated	
Xylene, mixed isomers		Group 3		
Titanium dioxide		Group 2B	-	-
Ethylbenzene	A3	Group 2B	-	=
Carbon black	A3	Group 2B	-	Χ
Quartz	A2	Group 1	Known	Χ
Cumene		Group 2B	Reasonably Anticipated	Χ
Silicon dioxide	-	Group 3		-
Toluene	A4	Group 3	-	-

## ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Donbnia Magna (Water

Group 2A - Probably 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

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

### **OSHA: (Occupational Safety & Health Administration)**

X - Present

Reproductive Toxicity STOT - single exposure STOT - repeated exposure Contains a known or suspected reproductive toxin. May damage fertility or the unborn child

May cause respiratory irritation

Causes damage to organs through prolonged or repeated exposure.

**Chronic Toxicity**Avoid repeated exposure. Contains a known or suspected reproductive toxin. Contains a known or suspected mutagen Ethylbenzene has been classified by the International Agency

for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B).

Prolonged or repeated overexposure to ethylbenzene may result in adverse effects to the kidneys, liver, respiratory system, thyroid, testicles, and pituitary glands. May cause

Taviaity to

adverse effects on the bone marrow and blood-forming system.

Target Organ Effects Kidney. Respiratory system. Eyes. Skin. Central nervous system (CNS). Blood. Lungs.

Lymphatic system.

**Aspiration Hazard** May be fatal if swallowed and enters airways.

Toxicity to Algon

## 12. ECOLOGICAL INFORMATION

Toxicity to Fish

#### Ecotoxicity

Chamical Name

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Petroleum naphtha, light aromatic 64742-95-6		LC50 96 h: = 9.22 mg/L (Oncorhynchus mykiss)		EC50 48 h: = 6.14 mg/L (Daphnia magna)
1,2,4 Trimethylbenzene 95-63-6		LC50 96 h: 7.19 - 8.28 mg/L flow-through (Pimephales promelas)		EC50 48 h: = 6.14 mg/L (Daphnia magna)
Chrome yellow (Lead chromate pigment) 1344-37-2		LC50 96 h: > 10000 mg/L static (Leuciscus idus)	EC50 > 10000 mg/L 30 min	
Xylene, mixed isomers 1330-20-7	EC50 72 h: = 11 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: = 13.4 mg/L flow-through (Pimephales promelas) LC50 96 h: 2.661 - 4.093 mg/L static (Oncorhynchus mykiss) LC50 96 h: 13.5 - 17.3 mg/L (Oncorhynchus mykiss) LC50 96 h: 13.1 - 16.5 mg/L flow-through (Lepomis macrochirus) LC50 96 h: 19 mg/L (Lepomis macrochirus) LC50 96 h: 7.711 - 9.591 mg/L static (Lepomis macrochirus) LC50 96 h: 23.53 - 29.97 mg/L static (Pimephales promelas) LC50 96 h: = 780 mg/L semi-static (Cyprinus carpio) LC50 96 h: 780 mg/L (Cyprinus carpio) LC50 96 h: 30.26 - 40.75 mg/L static (Poecilia reticulata)		EC50 48 h: = 3.82 mg/L (water flea) LC50 48 h: = 0.6 mg/L (Gammarus lacustris)
Ethylbenzene 100-41-4	EC50 96 h: 1.7 - 7.6 mg/L static (Pseudokirchneriella subcapitata)	LC50 96 h: 4 mg/L static (Rainbow trout)		EC50 48 h: 1-4 mg/L (Daphnia magna)

1,3,5-Trimethylbenzene		LC50 96 h: = 3.48 mg/L		EC50 24 h: = 50 mg/L
108-67-8		(Pimephales promelas)		(Daphnia magna)
		LC50 96 h: = 7.72 mg/L		
		flow-through (Pimephales		
		promelas)		
Carbon black				EC50 24 h: > 5600 mg/L
1333-86-4				(Daphnia magna)
Cumene	EC50 72 h: = 2.6 mg/L	LC50 96 h: 6.04 - 6.61 mg/L	EC50 = 0.89  mg/L  5  min	EC50 48 h: 7.9 - 14.1 mg/L
98-82-8	(Pseudokirchneriella	flow-through (Pimephales	EC50 = 1.10 mg/L 15 min	Static (Daphnia magna)
	subcapitata)	promelas) LC50 96 h: = 2.7	EC50 = 1.48 mg/L 30 min	EC50 48 h: = 0.6 mg/L
		mg/L semi-static	EC50 = 172 mg/L 24 h	(Daphnia magna)
		(Oncorhynchus mykiss)		
		LC50 96 h: = 4.8 mg/L		
		flow-through (Oncorhynchus		
		mykiss) LC50 96 h: = 5.1		
		mg/L semi-static (Poecilia		
		reticulata)		
Silicon dioxide	EC50 72 h: = 440 mg/L	LC50 96 h: = 5000 mg/L		EC50 48 h: = 7600 mg/L
7631-86-9	(Pseudokirchneriella	static (Brachydanio rerio)		(Ceriodaphnia dubia)
	subcapitata)			
2-Ethylhexanoic acid	EC50 96 h: = 41 mg/L	LC50 96 h: < 3000 mg/L	EC50 = 110  mg/L  17  h	EC50 48 h: = 85.4 mg/L
149-57-5	(Desmodesmus	semi-static (Brachydanio	EC50 = 670 mg/L 30 min	(Daphnia magna)
	subspicatus) EC50 72 h: =	rerio) LC50 96 h: = 70 mg/L		
	61 mg/L (Desmodesmus	(Pimephales promelas)		
	subspicatus)			
Toluene	EC50: 12.5 mg/L	LC50: 96 h static <=10 mg/L		LC50 48 h: 7.6 mg/L
108-88-3	Pseudokirchneriella	(Rainbow trout)		(Daphnia magna)
	subcapitata 72 h static			

Persistence and Degradability

No information available.

## **Bioaccumulation**

Chemical Name	Log Pow
1,2,4 Trimethylbenzene	3.63
Xylene, mixed isomers	2.77 - 3.15
Ethylbenzene	3.2
Cumene	3.7
2-Ethylhexanoic acid	2.7
Toluene	2.7

MobilityNo information available.Other Adverse EffectsNo information available.

## 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with local/regional/national regulations.

Contaminated Packaging Do not re-use empty containers.

US EPA Waste Number D001 U055

U220 U239

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Xylene, mixed isomers - 1330-20-7		Included in waste stream: F039		U239
Ethylbenzene - 100-41-4		Included in waste stream: F039		
Cumene - 98-82-8				U055
Toluene - 108-88-3	U220	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151		U220
Component	RCRA - Halogena Organic Compour		stes RCRA - F Series Wastes	RCRA - K Series Wastes

Toluene	Toxic waste
108-88-3 ( 0.23 )	waste number F025
, ,	Waste description:
	Condensed light ends,
	spent filters and filter aids,
	and spent desiccant
	wastes from the production
	of certain chlorinated
	aliphatic hydrocarbons, by
	free radical catalyzed
	processes. These
	chlorinated aliphatic
	hydrocarbons are those
	having carbon chain
	lengths ranging from one
	to and including five, with
	varying amounts and
	positions of chlorine
	substitution.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Chromium (III) oxide	Toxic
	Corrosive
	Ignitable
Chrome yellow (Lead chromate pigment)	Toxic
	Corrosive
	Ignitable
Xylene, mixed isomers	Toxic
·	Ignitable
Ethylbenzene	Toxic
	Ignitable
Cumene	Toxic
	Ignitable
Toluene	Toxic
	Ignitable

## 14. TRANSPORT INFORMATION

DOT

UN-Number UN1263
Proper shipping name Paint
Hazard Class 3
Packing Group III

**Description** UN1263, Paint, 3, III, Marine Pollutant

**Emergency Response Guide** 128

Number

<u>TDG</u>

UN-Number UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group III

**Description** UN1263, Paint, 3, III, Marine Pollutant

<u>MEX</u>

UN-Number UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group III

**Description** UN1263, Paint, 3, III

IATA

UN-Number UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group III

**ERG Code** 

UN1263, Paint, 3, III Description

IMDG/IMO

**UN-Number** UN1263 **Proper Shipping Name** Paint **Hazard Class** 3 **Packing Group** Ш EmS No. F-E, S-E

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

UN1263, Paint, 3, III, (42.22°C c.c.), Marine Pollutant Description

## 15. REGULATORY INFORMATION

International Regulations

Ozone depleting substances Not applicable **Persistent Organic Pollutants** Not applicable

**Hazardous Waste** 

Chemical Name	Basel Convention (Hazardous Wastes)
Chemical Frits (Lead free)	Y26 Y23 Y27 Y22 Y24 Y31
Chrome yellow (Lead chromate pigment)	Y21 Y31
Xylene, mixed isomers	Y42
2-Ethylhexanoic acid	Y34
Toluene	Y42

The Rotterdam Convention (Prior Not applicable

Informed Consent)

International Convention for the Not applicable

**Prevention of Pollution from Ships** 

(MARPOL)

**International Inventories** 

**TSCA** Complies Complies DSL

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 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	CAS-No	Weight %	SARA 313 - Threshold Values %
1,2,4 Trimethylbenzene	95-63-6	29.51	1.0
Chromium (III) oxide	1308-38-9	25.82	1.0
Chemical Frits (Lead free)	65997-18-4	21.04	0.1 1.0
Chrome yellow (Lead chromate pigment)	1344-37-2	17.44	0.1
Xylene, mixed isomers	1330-20-7	17	1.0
Spinels, chromium cobalt iron black	68186-97-0	10-30	0.1 1.0
C.I. Pigment Blue 28	1345-16-0	10-30	0.1
Ethylbenzene	100-41-4	7.01	0.1
Cumene	98-82-8	2.95	1.0
Toluene	108-88-3	0.23	1.0

## SARA 311/312 Hazard Categories

**Acute Health Hazard** Yes **Chronic Health Hazard** Yes Fire Hazard Yes **Sudden Release of Pressure Hazard** No **Reactive Hazard** No

## Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21

and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Chromium (III) oxide		X		
Chemical Frits (Lead free)		X		
Chrome yellow (Lead chromate pigment)		Х		
Xylene, mixed isomers	100 lb			X
Ethylbenzene	1000 lb	X	X	X
Toluene	1000 lb	X	X	X

## **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Xylene, mixed isomers	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
Ethylbenzene	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Cumene	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Toluene	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

## U.S. State Regulations

## **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Chemical Frits (Lead free)	65997-18-4	Carcinogen Developmental
Chrome yellow (Lead chromate pigment)	1344-37-2	Carcinogen Developmental Female Reproductive Male Reproductive
Titanium dioxide	13463-67-7	Carcinogen
Ethylbenzene	100-41-4	Carcinogen
Carbon black	1333-86-4	Carcinogen
Quartz	14808-60-7	Carcinogen
Cumene	98-82-8	Carcinogen
Toluene	108-88-3	Developmental
Chromium (VI)	18540-29-9	Carcinogen Developmental Female Reproductive Male Reproductive

## U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
1,2,4 Trimethylbenzene	Х	X	X	X	X
Chromium (III) oxide	Χ	X	X	X	Х
Chemical Frits (Lead free)	Х		X	X	
Chrome yellow (Lead chromate pigment)	Х		Х	Х	Х
Xylene, mixed isomers	Χ	X	X	X	X
Titanium dioxide	Χ	X	X		X
Ethylbenzene	Χ	X	X	X	X
1,3,5-Trimethylbenzene	Χ	X	X	X	Х
Carbon black	Χ	X	X	X	X
Quartz	Х	X	X	-	X
Cumene	Х	X	Х	X	Х

Stoddard solvent	Х	Х	Х		Х
Toluene	X	X	Χ	Χ	X

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION					
NFPA	Health Hazard 2	Flammability 2	Instability 0	Physical and Chemical Hazards -	
<u>HMIS</u>	Health Hazard 2*	Flammability 2	Physical Hazard 0	Personal Protection X	

\*Indicates a chronic health hazard.

**Prepared By Product Stewardship** 

23 British American Blvd. Latham, NY 12110 1-800-572-6501 28-Oct-2016

**Issuing Date Revision Date** 28-Oct-2016 **Revision Note** Initial Release.

<u>General Disclaimer</u>
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**