

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Trade name : HANDY FLO 475 / PREMABRAZE 178
Product code : A00000778
Product group : Trade product

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Lucas-Milhaupt Toronto
290 Carlingview Drive
M9W 5G1 Rexdale - Canada
T +1 (416) 675-1860
LM_SDSinfo@lucasmilhaupt.com - www.lucasmilhaupt.com

1.4. Emergency telephone number

Emergency number : CHEMTREC Within the USA and Canada: 1-800-424-9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Not classified

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

No labelling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Nickel	Nickel metal / Nickel, elemental / Nickel, metallic / Nickel, metal / C.I. 77775	(CAS-No.) 7440-02-0	38.745 - 45.8925	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Acute 1, H400
Palladium	Palladium Black	(CAS-No.) 7440-05-3	28.7 - 32.19	Not classified
Chromium	Chromium metal / Chromium, elemental / Chromium, metal / Chromium, metallic / Chromium (hexavalent)	(CAS-No.) 7440-47-3	7.79 - 10.005	Comb. Dust
Ethylene glycol	1,2-Dihydroxyethane / Ethane-1,2-diol / 1,2-Ethanediol / Ethanediol / Dowtherm 4000 / GLYCOL / Glycol / Monoethylene glycol / Ethandiol	(CAS-No.) 107-21-1	3.9 - 5.1	Acute Tox. 4 (Oral), H302 STOT SE 3, H335
Boron		(CAS-No.) 7440-42-8	2.05 - 2.8275	Acute Tox. 4 (Oral), H302
Silicon	Silicon powder	(CAS-No.) 7440-21-3	0.205 - 0.87	Not classified
SODIUM HYDROXIDE 10 %	sodium hydroxide; caustic soda Caustic soda / Sodium hydroxide (Na(OH)) / SODIUM HYDROXIDE / LYE	(CAS-No.) 1310-73-2	0.2938 - 0.3842	Met. Corr. 1, H290 HHNOC 1 Skin Corr. 1, H314 Skin Irrit. 2, H315 Eye Dam. 1, H318 Eye Irrit. 2, H319 STOT SE 3, H335

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Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Cellulose hydroxypropyl methyl ether	HYDROXYPROPYL METHYLCELLULOSE / Hydroxypropyl Methylcellulose / Hydroxypropyl methylcellulose / Hydroxypropylmethyl cellulose / Hydroxymethyl propyl cellulose / 2-Hydroxypropyl cellulose methyl ether / Methocel E50 premium / 2-Hydroxypropylmethyl cellulose / Hydroxypropylmethyl Cellulose / Hydroxypropylmethylcellulose / Methylhydroxypropylcellulose / Hypromellose / Hydroxypropyl methyl cellulose / Hydroxy propyl methyl cellulose / Cellulose, 2-hydroxypropyl methyl ester / Hydroxypropyl methyl cellulose, ether / Hydroxypropyl methylcellulose / Cellulose, 2-hydroxypropyl methyl ether	(CAS-No.) 9004-65-3	0.20592 - 0.26928	Comb. Dust
Acrylic resin	Acrylic acid homopolymer / Acrylic acid polymer / Acrylic polymer / Polyacrylic acid / 2-Propenoic acid, homopolymer / Acrylic acid, polymerized / Propenoic acid, 2-, homopolymer / CARBOMER / Carboxy vinyl polymer / 2-Propenoic acid, homopolymer, sodium salt / POLYACRYLIC ACID / Polyacrylate / Carbomer 934 / 2-Propenoic acid, homopolymer	(CAS-No.) 9003-01-4	0.0607945 - 0.0795005	Acute Tox. 4 (Inhalation:dust,mist), H332
Petroleum distillates, hydrotreated light	Distillates (petroleum), hydrotreated light / Distillates, petroleum, hydrotreated light / Hydrotreated light distillate / Jet fuels / Kerosene, hydrotreated / Petroleum distillates, hydrotreated light (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9-16 and boiling in the range of approximately 150-290°C.) / Odorless light petroleum hydrocarbons / Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics,	(CAS-No.) 64742-47-8	0.0104 - 0.0136	Asp. Tox. 1, H304
Benzene	Cyclohexatriene / Benzol	(CAS-No.) 71-43-2	0.0003055 - 0.0003995	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

- Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Unsuitable extinguishing media

No additional information available

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5.3. Specific hazards arising from the hazardous product

No additional information available

5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethylene glycol (107-21-1)		
USA - ACGIH	ACGIH TWA (ppm)	25 ppm (vapor fraction)
USA - ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
USA - ACGIH	ACGIH STEL (ppm)	50 ppm (vapor fraction)
Canada (Quebec)	PLAFOND (mg/m ³)	127 mg/m ³ (mist and vapour)
Canada (Quebec)	PLAFOND (ppm)	50 ppm (mist and vapour)
Alberta	OEL Ceiling (mg/m ³)	100 mg/m ³
British Columbia	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
British Columbia	OEL Ceiling (ppm)	50 ppm (vapour)
British Columbia	OEL STEL (mg/m ³)	20 mg/m ³ (particulate)
British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (particulate)
Manitoba	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Manitoba	OEL STEL (ppm)	50 ppm (vapor fraction)
Manitoba	OEL TWA (ppm)	25 ppm (vapor fraction)
New Brunswick	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Newfoundland & Labrador	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Newfoundland & Labrador	OEL STEL (ppm)	50 ppm (vapor fraction)
Newfoundland & Labrador	OEL TWA (ppm)	25 ppm (vapor fraction)
Nova Scotia	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Nova Scotia	OEL STEL (ppm)	50 ppm (vapor fraction)
Nova Scotia	OEL TWA (ppm)	25 ppm (vapor fraction)
Nunavut	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Northwest Territories	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Ontario	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)
Prince Edward Island	OEL STEL (mg/m ³)	10 mg/m ³ (inhalable particulate matter, aerosol only)
Prince Edward Island	OEL STEL (ppm)	50 ppm (vapor fraction)
Prince Edward Island	OEL TWA (ppm)	25 ppm (vapor fraction)
Saskatchewan	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Yukon	OEL STEL (mg/m ³)	20 mg/m ³ (particulate)

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Ethylene glycol (107-21-1)		
Yukon	OEL STEL (ppm)	10 ppm (particulate)
Yukon	OEL TWA (mg/m ³)	10 mg/m ³ (particulate)
Yukon	OEL TWA (ppm)	100 ppm (vapour)
Petroleum distillates, hydrotreated light (64742-47-8)		
British Columbia	OEL TWA (mg/m ³)	200 mg/m ³ (application restricted to conditions in which there are negligible aerosol exposures)
SODIUM HYDROXIDE 10 % (1310-73-2)		
USA - ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
Canada (Quebec)	PLAFOND (mg/m ³)	2 mg/m ³
Alberta	OEL Ceiling (mg/m ³)	2 mg/m ³
British Columbia	OEL Ceiling (mg/m ³)	2 mg/m ³
Manitoba	OEL Ceiling (mg/m ³)	2 mg/m ³
New Brunswick	OEL Ceiling (mg/m ³)	2 mg/m ³
Newfoundland & Labrador	OEL Ceiling (mg/m ³)	2 mg/m ³
Nova Scotia	OEL Ceiling (mg/m ³)	2 mg/m ³
Nunavut	OEL Ceiling (mg/m ³)	2 mg/m ³
Northwest Territories	OEL Ceiling (mg/m ³)	2 mg/m ³
Ontario	OEL Ceiling (mg/m ³)	2 mg/m ³
Prince Edward Island	OEL Ceiling (mg/m ³)	2 mg/m ³
Saskatchewan	OEL Ceiling (mg/m ³)	2 mg/m ³
Yukon	OEL Ceiling (mg/m ³)	2 mg/m ³
Benzene (71-43-2)		
USA - ACGIH	ACGIH TWA (ppm)	0.5 ppm
USA - ACGIH	ACGIH STEL (ppm)	2.5 ppm
USA - OSHA	OSHA PEL (TWA) (ppm)	10 ppm 1 ppm
USA - OSHA	OSHA PEL (STEL) (ppm)	5 ppm (see 29 CFR 1910.1028)
USA - OSHA	OSHA PEL (Ceiling) (ppm)	25 ppm
USA - OSHA	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	50 ppm Peak (10 minutes)
Canada (Quebec)	VECD (mg/m ³)	15.5 mg/m ³
Canada (Quebec)	VECD (ppm)	5 ppm
Canada (Quebec)	VEMP (mg/m ³)	3 mg/m ³
Canada (Quebec)	VEMP (ppm)	1 ppm
Alberta	OEL STEL (mg/m ³)	8 mg/m ³
Alberta	OEL STEL (ppm)	2.5 ppm
Alberta	OEL TWA (mg/m ³)	1.6 mg/m ³
Alberta	OEL TWA (ppm)	0.5 ppm
British Columbia	OEL STEL (ppm)	2.5 ppm
British Columbia	OEL TWA (ppm)	0.5 ppm
Manitoba	OEL STEL (ppm)	2.5 ppm
Manitoba	OEL TWA (ppm)	0.5 ppm
New Brunswick	OEL STEL (mg/m ³)	8 mg/m ³
New Brunswick	OEL STEL (ppm)	2.5 ppm
New Brunswick	OEL TWA (mg/m ³)	1.6 mg/m ³
New Brunswick	OEL TWA (ppm)	0.5 ppm
Newfoundland & Labrador	OEL STEL (ppm)	2.5 ppm
Newfoundland & Labrador	OEL TWA (ppm)	0.5 ppm
Nova Scotia	OEL STEL (ppm)	2.5 ppm
Nova Scotia	OEL TWA (ppm)	0.5 ppm
Ontario	OEL STEL (ppm)	2.5 ppm (designated substances regulation)
Ontario	OEL TWA (ppm)	0.5 ppm (applies to workplaces to which the designated substances regulation does not apply)

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Benzene (71-43-2)		
Prince Edward Island	OEL STEL (ppm)	2.5 ppm
Prince Edward Island	OEL TWA (ppm)	0.5 ppm
Yukon	OEL Ceiling (mg/m ³)	32 mg/m ³
Yukon	OEL Ceiling (ppm)	10 ppm
Chromium (7440-47-3)		
USA - ACGIH	ACGIH TWA (mg/m ³)	0.5 mg/m ³ (inhalable particulate matter)
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
Canada (Quebec)	VEMP (mg/m ³)	0.5 mg/m ³
Alberta	OEL TWA (mg/m ³)	0.5 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.5 mg/m ³
Manitoba	OEL TWA (mg/m ³)	0.5 mg/m ³ (inhalable particulate matter)
New Brunswick	OEL TWA (mg/m ³)	0.5 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	0.5 mg/m ³ (inhalable particulate matter)
Nova Scotia	OEL TWA (mg/m ³)	0.5 mg/m ³ (inhalable particulate matter)
Nunavut	OEL STEL (mg/m ³)	1.5 mg/m ³ (metal)
Nunavut	OEL TWA (mg/m ³)	0.5 mg/m ³ (metal)
Northwest Territories	OEL STEL (mg/m ³)	1.5 mg/m ³ (metal)
Northwest Territories	OEL TWA (mg/m ³)	0.5 mg/m ³ (metal)
Ontario	OEL TWA (mg/m ³)	0.5 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	0.5 mg/m ³ (inhalable particulate matter)
Saskatchewan	OEL STEL (mg/m ³)	1.5 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	0.5 mg/m ³
Yukon	OEL STEL (mg/m ³)	3 mg/m ³
Yukon	OEL TWA (mg/m ³)	0.1 mg/m ³
Nickel (7440-02-0)		
USA - ACGIH	ACGIH TWA (mg/m ³)	1.5 mg/m ³ (inhalable particulate matter)
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
Canada (Quebec)	VEMP (mg/m ³)	1 mg/m ³
Alberta	OEL TWA (mg/m ³)	1.5 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.05 mg/m ³
Manitoba	OEL TWA (mg/m ³)	1.5 mg/m ³ (inhalable particulate matter)
New Brunswick	OEL TWA (mg/m ³)	1 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	1.5 mg/m ³ (inhalable particulate matter)
Nova Scotia	OEL TWA (mg/m ³)	1.5 mg/m ³ (inhalable particulate matter)
Nunavut	OEL STEL (mg/m ³)	3 mg/m ³ (inhalable fraction)
Nunavut	OEL TWA (mg/m ³)	1.5 mg/m ³ (inhalable fraction)
Northwest Territories	OEL STEL (mg/m ³)	3 mg/m ³ (inhalable fraction)
Northwest Territories	OEL TWA (mg/m ³)	1.5 mg/m ³ (inhalable fraction)
Ontario	OEL TWA (mg/m ³)	1 mg/m ³ (inhalable)
Prince Edward Island	OEL TWA (mg/m ³)	1.5 mg/m ³ (inhalable particulate matter)
Saskatchewan	OEL STEL (mg/m ³)	3 mg/m ³ (inhalable fraction)
Saskatchewan	OEL TWA (mg/m ³)	1.5 mg/m ³ (inhalable fraction)
Yukon	OEL STEL (mg/m ³)	3 mg/m ³
Yukon	OEL TWA (mg/m ³)	1 mg/m ³
Silicon (7440-21-3)		
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Canada (Quebec)	VEMP (mg/m ³)	10 mg/m ³ (containing no Asbestos and <1% Crystalline silica-total dust)
British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (total dust)

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Silicon (7440-21-3)		
New Brunswick	OEL TWA (mg/m ³)	10 mg/m ³
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	10 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³
Yukon	OEL STEL (mg/m ³)	20 mg/m ³
Yukon	OEL TWA (mg/m ³)	30 mppcf

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: No data available
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative density	: Not applicable
Solubility	: No data available
Log Pow	: No data available
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.

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Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Ethylene glycol (107-21-1)	
LD50 oral rat	4700 mg/kg
LD50 dermal rat	10600 mg/kg
ATE CA (oral)	500 mg/kg bodyweight
ATE CA (Dermal)	10600 mg/kg bodyweight

Petroleum distillates, hydrotreated light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.2 mg/l/4h

SODIUM HYDROXIDE 10 % (1310-73-2)	
LD50 oral rat	140 - 340 mg/kg
LD50 dermal rabbit	1350 mg/kg
ATE CA (Dermal)	1350 mg/kg bodyweight

Benzene (71-43-2)	
LD50 oral rat	810 mg/kg
LD50 dermal rabbit	> 8200 mg/kg
LC50 inhalation rat (mg/l)	44.66 mg/l/4h
ATE CA (oral)	810 mg/kg bodyweight
ATE CA (vapours)	44.66 mg/l/4h
ATE CA (dust,mist)	44.66 mg/l/4h

Acrylic resin (9003-01-4)	
LD50 oral rat	2500 mg/kg
LC50 inhalation rat (mg/l)	1.71 mg/l/4h
ATE CA (oral)	2500 mg/kg bodyweight
ATE CA (vapours)	1.71 mg/l/4h
ATE CA (dust,mist)	1.71 mg/l/4h

Boron (7440-42-8)	
LD50 oral rat	650 mg/kg
ATE CA (oral)	650 mg/kg bodyweight

Nickel (7440-02-0)	
LD50 oral rat	> 9000 mg/kg
LC50 inhalation rat (mg/l)	> 10.2 mg/l (Exposure time: 1 h)

Silicon (7440-21-3)	
LD50 oral rat	3160 mg/kg
ATE CA (oral)	3160 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

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Ethylene glycol (107-21-1)	
STOT-single exposure	May cause respiratory irritation.

SODIUM HYDROXIDE 10 % (1310-73-2)	
STOT-single exposure	May cause respiratory irritation.

: Not classified

STOT-repeated exposure

Benzene (71-43-2)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Nickel (7440-02-0)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

Ethylene glycol (107-21-1)	
LC50 fish 1	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC50 fish 2	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 96h algae (1)	6500 - 13000 mg/l (Species: Pseudokirchneriella subcapitata)
Log Pow	-1.93

Petroleum distillates, hydrotreated light (64742-47-8)	
LC50 fish 1	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
BCF fish 1	61 - 159

SODIUM HYDROXIDE 10 % (1310-73-2)	
LC50 fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

Benzene (71-43-2)	
LC50 fish 1	10.7 - 14.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	5.3 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 1	8.76 - 15.6 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 Daphnia 2	10 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h algae (1)	29 mg/l (Species: Pseudokirchneriella subcapitata)
BCF fish 1	3.5 - 4.4
Log Pow	2.1

Acrylic resin (9003-01-4)	
LC50 fish 1	580 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

Nickel (7440-02-0)	
LC50 fish 1	> 100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
LC50 fish 2	1.3 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 1	> 100 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 2	1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 72h algae (1)	0.18 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 96h algae (1)	0.174 - 0.311 mg/l (Species: Pseudokirchneriella subcapitata [static])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Ethylene glycol (107-21-1)	
Log Pow	-1.93

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BCF fish 1	61 - 159

Benzene (71-43-2)	
BCF fish 1	3.5 - 4.4
Log Pow	2.1

12.4. Mobility in soil

Ethylene glycol (107-21-1)	
Log Pow	-1.93

Benzene (71-43-2)	
Log Pow	2.1

12.5. Other adverse effects

Ozone : Not classified

Ethylene glycol (107-21-1)	
1990 Hazardous Air Pollutant (Clean Air Act)	Yes

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

Transportation of Dangerous Goods

Not regulated for transport

14.2. Transport information/DOT

Department of Transport

Not regulated for transport

14.3. Air and sea transport

IMDG

Not regulated for transport

IATA

Not regulated for transport

SECTION 15: Regulatory information

15.1. National regulations

Ethylene glycol (107-21-1)
Listed on the Canadian DSL (Domestic Substances List)

Cellulose hydroxypropyl methyl ether (9004-65-3)
Listed on the Canadian DSL (Domestic Substances List)

Petroleum distillates, hydrotreated light (64742-47-8)
Listed on the Canadian DSL (Domestic Substances List)

SODIUM HYDROXIDE 10 % (1310-73-2)
Listed on the Canadian DSL (Domestic Substances List)

Benzene (71-43-2)
Listed on the Canadian DSL (Domestic Substances List)

Acrylic resin (9003-01-4)
Listed on the Canadian DSL (Domestic Substances List)

Boron (7440-42-8)
Listed on the Canadian DSL (Domestic Substances List)

Chromium (7440-47-3)
Listed on the Canadian DSL (Domestic Substances List)

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Nickel (7440-02-0)

Listed on the Canadian DSL (Domestic Substances List)

Palladium (7440-05-3)

Listed on the Canadian DSL (Domestic Substances List)

Silicon (7440-21-3)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Ethylene glycol (107-21-1)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

Cellulose hydroxypropyl methyl ether (9004-65-3)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Petroleum distillates, hydrotreated light (64742-47-8)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

SODIUM HYDROXIDE 10 % (1310-73-2)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Japanese Poisonous and Deleterious Substances Control Law
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

Benzene (71-43-2)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

Toxic Substance (CEPA – Schedule I)

Yes

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Acrylic resin (9003-01-4)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Boron (7440-42-8)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Chromium (7440-47-3)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

Nickel (7440-02-0)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

Palladium (7440-05-3)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Silicon (7440-21-3)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on Turkish inventory of chemical

SECTION 16: Other information

Date of issue : 29 November 2017

Full text of H-statements:

H225	Highly flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.

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H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.

SDS Canada (GHS)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.