Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name
HAZARDOUS WASTE DERIVED FUEL - 2

Product Code
Not applicable.

Synonyms
HWDF, Synthetic Fuels, Fuel Blends, Waste Solvents

Product Use Recommended Use
Alternate fuel in the cement manufacturing process. This product is a RCRA (US EPA Resource Conservation and Recovery Act) and CEPA (Canadian Environmental Protection Act) hazardous waste and is subject to the RCRA and CEPA manifesting requirements. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

Restrictions on Use
THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA.

FOR PRODUCT MANUFACTURED IN THE U.S.A.:

MANUFACTURER
Kleen Performance Products
2600 North Central Expressway
Suite 200
Richardson, TX 75080 U.S.A.

SUPPLIER (in Canada)
Safety-Kleen Canada, Inc.
25 Regan Road
Brampton, Ontario, Canada L1A 1B2

FOR PRODUCT MANUFACTURED IN CANADA:

MANUFACTURER
Kleen Performance Products
25 Regan Road
Brampton, Ontario, Canada L1A 1B2

SUPPLIER (in the U.S.A.)
Safety-Kleen Systems, Inc.
2600 North Central Expressway
Suite 200
Richardson, TX 75080 U.S.A.

www.safety-kleen.com
Phone: 1-800-669-5740

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June 10, 2019

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Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with Schedule 1 of Canada's Hazardous Products Regulations (HPR) (SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200 in the United States

Flammable Liquids - Category 2
Aspiration Hazard - Category 1
Acute Toxicity - Oral - Category 3
Acute Toxicity - Dermal - Category 3
Acute Toxicity - Inhalation - Dust/Mist - Category 2
Acute Toxicity - Inhalation - Vapor - Category 1
Skin Corrosion/Irritation - Category 1

Serious Eye Damage/Eye Irritation - Category 1
Skin Sensitization - Category 1
Germ Cell Mutagenicity - Category 1B
Carcinogenicity - Category 1A
Reproductive Toxicity - Category 1A
Specific Target Organ Toxicity - Single Exposure - Category 1, Category 2, Category 3
Specific Target Organ Toxicity - Repeated Exposure - Category 1, Category 2
Health Hazard Not Otherwise Classified. - Category 1

GHS Label Elements

Symbol(s)

Signal Word

Danger

Hazard Statement(s)

Highly flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Toxic if swallowed or in contact with skin.
Fatal if inhaled.
Causes severe skin burns and eye damage.
May cause allergic skin reaction, genetic defects, and cancer.
May damage fertility or the unborn child.
Causes damage to organs.
May cause damage to organs, respiratory irritation, and drowsiness or dizziness.
Causes damage to organs through prolonged or repeated exposure.
May cause damage to organs through prolonged or repeated exposure.
Causes severe damage to the respiratory tract.

Precautionary Statement(s)

Prevention

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

Response

In case of fire: Use water spray, dry chemical, foam, or carbon dioxide. If exposed or concerned: Call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Specific treatment is urgent.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get

medical advice/attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

Storage

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

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Statement(s) of Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown acute toxicity.

Statement(s) of Unknown Aquatic Toxicity

0% of the mixture consists of ingredient(s) of unknown acute and chronic aquatic toxicity.

Other hazards

None known.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
Toluene (108-88-3), Phenol (108-95-2), Benzene, ethyl- (100-41-4), Styrene (100-42-5), Benzene (71-43-2), Naphthalene (91-20-3), Xylenes (o-, m-, p- isomers) (1330-20-7)		0-60
Pentane (109-66-0), Decane (124-18-5), Cyclohexane (110-82-7), Octane (111-65-9), Nonane (111-84-2), Hexane (110-54-3), Dodecane (112-40-3), Heptane (n-) (142-82-5)		0-90
1,2-Propylene glycol (57-55-6), Ethyl alcohol (64-17-5), Methyl alcohol (67-56-1), Isopropyl alcohol (67-63-0), Acetone (67-64-1), n-Propyl alcohol (71-23-8), n-Butyl alcohol (71-36-3), Water (7732-18-5), Methyl ethyl ketone (78-93-3), Ethylene glycol (107-21-1), Methyl n-amyl ketone (110-43-0), Cycohexanol (108-93-0), Cyclohexanone (108-94-1), Hexone (108-10-1)		0-40
Not Available	Solids	0-25
1,1,1,-Tricholoethane (71-55-6), Methylene chloride (75-09-2), Trichoroethane (79-01-6), Tetrachloroethylene (127-18-4)		0-20
n-Butyl acetate (123-86-4), 2-Ethoxyethanol (110-80-5), Acetate, 2-butoxyethyl (112-07-2), Acetate, ethyl (141-78-6), Methyl acetate (79-20-9), Isopropyl acetate (108-21-4), n-Propyl acetate (109-60-4), 2-Methoxyethyl acetate (110-49-6), 2-Methoxyethanol (109-86-4), Propylene glycol monomethyl ether (107-98-2), Vinyl acetate (108-05-4)		0-15

Section 4 - FIRST AID MEASURES

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin

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

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion

IF SWALLOWED: aspiration hazard. Do NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER or doctor/physician. Call 1-800-468-1760 for additional information.

Most Important Symptoms/Effects

Acute

Fatal if inhaled, toxic if swallowed, toxic on contact with skin, skin sensitizer. central nervous system damage, central nervous system depression, circulatory system damage, eye damage, skin damage, respiratory system damage, respiratory tract irritation, blood system disorders, retina damage, systemic toxicity, heart damage, testes damage, aspiration hazard.

Delayed

Cancer, mutagenic effects, reproductive effects, skin sensitizer, central nervous system damage, kidney damage, liver damage, lung damage, nervous system damage, cardiovascular system damage, respiratory system damage, circulatory system damage, digestive system damage, spleen damage, thymus damage, hematopoietic system damage, blood disorders, eye damage, autonomic nervous system damage, bone damage, retina damage, ear damage, heart damage, testes damage.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use water spray, dry chemical, foam, or carbon dioxide.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Special Hazards Arising from the Chemical

Highly flammable liquid and vapor. Avoid friction static electricity and sparks: The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Empty containers may contain product residue. Product may be sensitive to static discharge, which could result in fire or explosion. Run-off to sewer may create a fire hazard.

Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce: Phosgene, chlorides, chloroacetylenes, formaldehyde, peracetic acid, carbon monoxide and unidentified organic compounds.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Apply water from a protected location or from a safe distance. Dike for later disposal.

Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible

recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal. There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see SECTION 15: REGULATORY INFORMATION.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring large quantities of product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, Skin, clothing, shoes. Do not smoke while using this product.

Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition; containers may explode and cause injury or death. Empty product containers may retain product residue and can be dangerous. See SECTION 14: TRANSPORTATION INFORMATION for Packing Group information.

Incompatible Materials

Strong acids, strong oxidizing materials, alkalies, reducing agents, reactive halogens or reactive metals.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Toluene	**108-88-3**
Alberta	50 ppm TWA ; 188 mg/m3 TWA; Substance may be readily absorbed through intact skin
British Columbia, Nova Scotia, Ontario Prince Edward Island	20 ppm TWA
Manitoba	20 ppm TWA; Skin - potential for cutaneous absorption
New Brunswick	50 ppm TWA ; 188 mg/m3 TWA; Skin - potential for cutaneous absorption
Northwest Territories, Nunavut	50 ppm TWA; 60 ppm STEL; Skin notation
Quebec	50 ppm TWAEV ; 188 mg/m3 TWAEV; Skin designation
Saskatchewan	50 ppm TWA; 60 ppm STEL; Potentially harmful after absorption through skin or mucous membranes
Yukon	100 ppm TWA ; 375 mg/m3 TWA; 150 ppm STEL ; 560 mg/m3 STEL; Skin notation
ACGIH	20 ppm TWA
OSHA Final	20 ppm TWA; 300 ppm ceiling
OSHA Vacated; NIOSH	100 ppm TWA; 375 mg/m3 TWA; 150 ppm STEL; 560 mg/m3 STEL
Phenol	**108-95-2**

Alberta	5 ppm TWA ; 19 mg/m3 TWA; Substance may be readily absorbed through intact skin
British Columbia	5 ppm TWA; Skin notation
Manitoba	5 ppm TWA; Skin - potential for cutaneous absorption; Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	5 ppm TWA ; 19 mg/m3 TWA; Skin - potential for cutaneous absorption
Northwest Territories, Nunavut,	5 ppm TWA; 7.5 ppm STEL; Skin notation
Nova Scotia	5 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
Ontario	5 ppm TWA; Danger of cutaneous absorption
Prince Edward Island	5 ppm TWA
Quebec	5 ppm TWAEV ; 19 mg/m3 TWAEV; Skin designation
Saskatchewan	5 ppm TWA; 7.5 ppm STEL; Potentially harmful after absorption through skin or mucous membranes
Yukon	5 ppm TWA ; 19 mg/m3 TWA; 10 ppm STEL ; 38 mg/m3 STEL Skin notation
ACGIH	5 ppm TWA; Skin potential for significant contribution to overall exposure by the cutaneous route
OSHA Final, OSHA Vacated	5 ppm TWA; 19 mg/m3 TWA; Prevent or reduce skin absorption
NIOSH	5 ppm TWA; 19 mg/m3 TWA; 15.6 ppm Ceiling (15 min); 60 mg/m3 Ceiling (15 min); Potential for dermal absorption
Pentane	**109-66-0**
Alberta	600 ppm TWA ; 1770 mg/m3 TWA
British Columbia, Ontario	600 ppm TWA
Manitoba, Nova Scotia	1000 ppm TWA
New Brunswick	600 ppm TWA ; 1770 mg/m3 TWA; 750 ppm STEL ; 2210 mg/m3 STEL
Northwest Territories, Nunavut, Saskatchewan	600 ppm TWA; 750 ppm STEL
Nova Scotia, Prince Edward Island	1000 ppm TWA
Quebec	120 ppm TWAEV ; 350 mg/m3 TWAEV
Yukon	600 ppm TWA ; 1800 mg/m3 TWA; 750 ppm STEL ; 2250 mg/m3 STEL
ACGIH	1000 ppm TWA
OSHA Final	1000 ppm TWA, 2590 mg/m3 TWA
OSHA Vacated	600 TWA, 1800 mg/m3 TWA, 750 ppm STEL, 2250 mg/m3 STEL
NIOSH	120 ppm TWA; 350 mg/m3 TWA, 610 ppm Ceiling (15 min), 1800 mg/m3 Ceiling (15 min)

Benzene, ethyl-	**100-41-4**
Alberta, New Brunswick	100 ppm TWA ; 434 mg/m3 TWA; 125 ppm STEL ; 543 mg/m3 STEL
British Columbia, Manitoba, Nova Scotia, Ontario, Prince Edward Island	20 ppm TWA
Northwest Territories, Nunavut, Saskatchewan	100 ppm TWA, 125 ppm STEL
Quebec	100 ppm TWAEV ; 434 mg/m3 TWAEV; 125 ppm STEV ; 543 mg/m3 STEV
Yukon	100 ppm TWA ; 435 mg/m3 TWA; 125 ppm STEL ; 545 mg/m3 STEL
ACGIH	20 ppm TWA
OSHA Final	100 ppm TWA, 435 mg/m3 TWA
OSHA Vacated, NIOSH	100 ppm TWA, 435 mg/m3 TWA, 125 ppm STEL, 125 mg/m3 STEL
Styrene	**100-42-5**
Alberta, New Brunswick	20 ppm TWA ; 85 mg/m3 TWA; 40 ppm STEL ; 170 mg/m3 STEL
British Columbia	50 ppm TWA; 75 ppm STEL
Manitoba	20 ppm TWA
Northwest Territories, Nova Scotia, Nunavut, Prince Edward Island, Saskatchewan	20 ppm TWA; 40 ppm STEL
Ontario	35 ppm TWA; 100 ppm STEL
Quebec	50 ppm TWAEV ; 213 mg/m3 TWAEV; 100 ppm STEV ; 426 mg/m3 STEV; Skin designation
Yukon	100 ppm TWA ; 420 mg/m3 TWA; 125 ppm STEL ; 525 mg/m3 STEL
ACGIH	20 ppm TWA, 40 ppm STEL
OSHA Final	100 ppm TWA, 200 ppm ceiling
OSHA Vacated, NIOSH	50 ppm TWA, 215 mg/m3 TWA, 100 ppm STEL, 425 mg/m3 STEL
Benzene	**71-43-2**
Alberta	0.5 ppm TWA ; 1.6 mg/m3 TWA; 2.5 ppm STEL ; 8 mg/m3 STEL Substance may be readily absorbed through intact skin
British Columbia, Prince Edward Island	0.5 ppm TWA; Skin notation; 2.5 ppm STEL
Manitoba	0.5 ppm TWA; Skin - potential for cutaneous absorption Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	0.5 ppm TWA ; 1.6 mg/m3 TWA; 2.5 ppm STEL ; 8 mg/m3 STEL Skin - potential for cutaneous absorption
Nova Scotia	0.5 ppm TWA; 2.5 ppm STEL; Skin - potential significant contribution to overall exposure by the cutaneous route

Ontario	0.5 ppm TWA (applies to workplaces to which the designated substances regulation does not apply); 0.5 ppm TWA (designated substances regulation); 2.5 ppm STEL (applies to workplaces to which the designated substance regulation does not apply); 2.5 ppm STEL (designated substances regulation) Danger of cutaneous absorption (designated substances regulation)
Quebec	1 ppm TWAEV ; 3 mg/m3 TWAEV; 5 ppm STEV ; 15.5 mg/m3 STEV
ACGIH	0.5 ppm TWA; 2.5 ppm STEL; Skin – potential for significant contribution to overall exposure by the cutaneous route
OSHA Final	5 ppm STEL (See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA; 10 ppm TWA (applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028); 1 ppm TWA; 5 ppm STEL (see 29 CFR 1910.1028) 25 ppm Ceiling
OSHA Vacated	10 ppm TWA (unless specified in 1910.1028), 50 ppm STEL (unless specified in 1910.1028, 10 min), 25 ppm Ceiling (unless specified in 1910.1028)
NIOSH	0.1 ppm TWA, 1 ppm STEL
Naphthalene	**91-20-3**
Alberta	10 ppm TWA ; 52 mg/m3 TWA; 15 ppm STEL ; 79 mg/m3 STEL Substance may be readily absorbed through intact skin
British Columbia, Northwest Territories, Nunavut	10 ppm TWA; Skin notation; 15 ppm STEL
Manitoba, Nova Scotia	10 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	10 ppm TWA ; 52 mg/m3 TWA; 15 ppm STEL ; 79 mg/m3 STEL
Ontario	10 ppm TWA; 15 ppm STEL ; Danger of cutaneous absorption
Prince Edward Island	10 ppm TWA
Quebec	10 ppm TWAEV ; 52 mg/m3 TWAEV; 15 ppm STEV ; 79 mg/m3 STEV
Saskatchewan	10 ppm TWA; 15 ppm STEL; Potentially harmful after absorption through skin or mucous membranes
Yukon	10 ppm TWA ; 50 mg/m3 TWA; 15 ppm STEL ; 75 mg/m3 STEL
ACGIH	10 ppm TWA, Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA Final	10 ppm TWA, 50 mg/m3 TWA
OSHA Vacated, NIOSH	10 ppm TWA; 50 mg/m3 TWA; 15 ppm STEL; 75 mg/m3 STEL
Xylenes (o-, m-, p- isomers)	**1330-20-7**
Alberta, New Brunswick	100 ppm TWA ; 434 mg/m3 TWA; 150 ppm STEL ; 651 mg/m3 STEL
British Columbia	100 ppm TWA; 50 ppm STEL
Manitoba	100 ppm TWA

Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	100 ppm TWA; 150 ppm STEL
Quebec	100 ppm TWAEV ; 434 mg/m3 TWAEV; 150 ppm STEV ; 651 mg/m3 STEV
Yukon	100 ppm TWA ; 435 mg/m3 TWA, 150 ppm STEL ; 650 mg/m3 STEL, Skin notation
ACGIH	100 ppm TWA; 150 ppm STEL
OSHA Final	100 ppm TWA, 435 mg/m3 TWA
OSHA Vacated	100 ppm TWA, 435 mg/m3 TWA, 150 ppm STEL, 655 mg/m3 STEL
Cyclohexane	**110-82-7**
Alberta	100 ppm TWA ; 344 mg/m3 TWA
British Columbia, Manitoba, Nova Scotia, Ontario, Prince Edward Island	100 ppm TWA
New Brunswick	300 ppm TWA ; 1030 mg/m3 TWA
Northwest Territories, Nunavut, Saskatchewan	100 ppm TWA; 150 ppm STEL
Quebec	300 ppm TWAEV ; 1030 mg/m3 TWAEV
Yukon	300 ppm TWA ; 1050 mg/m3 TWA; 375 ppm STEL ; 1300 mg/m3 STEL
ACGIH	100 ppm TWA
OSHA Final, OSHA Vacated, NIOSH	300 ppm TWA, 1050 mg/m3 TWA
Octane	**111-65-9**
Alberta	300 ppm TWA ; 1400 mg/m3 TWA
British Columbia, Manitoba, Nova Scotia, Ontario, Prince Edward Island	300 ppm TWA
New Brunswick	300 ppm TWA ; 1400 mg/m3 TWA; 375 ppm STEL ; 1750 mg/m3 STEL
Northwest Territories, Nunavut, Saskatchewan	300 ppm TWA; 375 ppm STEL
Quebec	300 ppm TWAEV ; 1400 mg/m3 TWAEV; 375 ppm STEV ; 1750 mg/m3 STEV
Yukon	300 ppm TWA ; 1450 mg/m3 TWA; 375 ppm STEL ; 1800 mg/m3 STEL
ACGIH	300 ppm TWA
OSHA Final	500 ppm TWA; 2350 mg/m3 TWA
OSHA Vacated	300 ppm TWA; 1450 mg/m3 TWA; 375 ppm STEL; 1800 mg/m3 STEL
NIOSH	75 ppm TWA; 350 mg/m3 TWA; 385 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)
Nonane	**111-84-2**
Alberta , New Brunswick	200 ppm TWA ; 1050 mg/m3 TWA

British Columbia, Manitoba, Nova Scotia, Ontario, Prince Edward Island	200 ppm TWA
Northwest Territories, Nunavut, Saskatchewan	200 ppm TWA; 250 ppm STEL
Nova Scotia	200 ppm TWA
Quebec	200 ppm TWAEV ; 1050 mg/m3 TWAEV
Yukon	200 ppm TWA ; 1050 mg/m3 TWA; 250 ppm STEL ; 1300 mg/m3 STEL
ACGIH	200 ppm TWA
OSHA Vacated, NIOSH	200 ppm TWA, 1050 mg/m3 TWA
Hexane	**110-54-3**
Alberta	50 ppm TWA ; 176 mg/m3 TWA Substance may be readily absorbed through intact skin
British Columbia	20 ppm TWA; Skin notation
Manitoba, Nova Scotia	50 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	50 ppm TWA ; 176 mg/m3 TWA
Northwest Territories, Nunavut	50 ppm TWA; 62.5 ppm STEL; Skin notation
Ontario	50 ppm TWA; Danger of cutaneous absorption
Prince Edward Island	50 ppm TWA
Quebec	50 ppm TWAEV ; 176 mg/m3 TWAEV; Skin designation
Saskatchewan	50 ppm TWA; 62.5 ppm STEL, Potentially harmful after absorption through skin or mucous membranes
Yukon	100 ppm TWA ; 360 mg/m3 TWA; 125 ppm STEL ; 450 mg/m3 STEL
ACGIH	50 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA Final	500 ppm TWA, 1800 mg/m3 TWA
OSHA Vacated, NIOSH	50 ppm TWA, 180 mg/m3 TWA
Heptane (n-)	**142-82-5**
Alberta, New Brunswick	400 ppm TWA ; 1640 mg/m3 TWA; 500 ppm STEL ; 2050 mg/m3 STEL
British Columbia, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	400 ppm TWA; 500 ppm STEL
Manitoba	400 ppm TWA
Quebec	400 ppm TWAEV ; 1640 mg/m3 TWAEV; 500 ppm STEV ; 2050 mg/m3 STEV
Yukon	400 ppm TWA ; 1600 mg/m3 TWA; 500 ppm STEL ; 2000 mg/m3 STEL

ACGIH	400 ppm TWA; 500 ppm STEL
OSHA Final	500 ppm TWA; 2000 mg/m3 TWA
OSHA vacated	400 ppm TWA; 1600 mg/m3 TWA; 500 ppm STEL; 2000 mg/m3 STEL
NIOSH	85 ppm TWA; 350 mg/m3 TWA; 440 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)
1,2-Propylene glycol	**57-55-6**
Ontario	10 mg/m3 TWA (for assessing the visibility in a work environment where 1,2-Propylene glycol aerosol is present) aerosol only ; 50 ppm TWA aerosol and vapor ; 155 mg/m3 TWA aerosol and vapor
Ethyl alcohol	**64-17-5**
Alberta, New Brunswick	1000 ppm TWA ; 1880 mg/m3 TWA
British Columbia, Nova Scotia, Ontario, Prince Edward Island	1000 ppm STEL
Northwest Territories, Nunavut, Saskatchewan	1000 ppm TWA; 1250 ppm STEL
Quebec	1000 ppm TWAEV ; 1880 mg/m3 TWAEV
Yukon	1000 ppm TWA ; 1900 mg/m3 TWA; 1000 ppm STEL ; 1900 mg/m3 STEL
ACGIH	1000 ppm STEL
OSHA Vacated, OSHA Final, NIOSH	1000 ppm TWA; 1900 mg/m3 TWA
Methyl alcohol	**67-56-1**
Alberta	200 ppm TWA ; 262 mg/m3 TWA;250 ppm STEL ; 328 mg/m3 STEL; Substance may be readily absorbed through intact skin
British Columbia, Northwest Territories, Nunavut	200 ppm TWA;Skin notation;250 ppm STEL
Manitoba	200 ppm TWA; Skin - potential for cutaneous absorption Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	200 ppm TWA ; 262 mg/m3 TWA; 250 ppm STEL ; 328 mg/m3 STEL; Skin - potential for cutaneous absorption
Nova Scotia	200 ppm TWA, 250 ppm STEL, Skin - potential significant contribution to overall exposure by the cutaneous route
Ontario	200 ppm TWA; 250 ppm STEL, Danger of cutaneous absorption
Prince Edward Island	200 ppm TWA, 250 ppm STEL
Quebec	200 ppm TWAEV ; 262 mg/m3 TWAEV, 250 ppm STEV ; 328 mg/m3 STEV, Skin designation
Saskatchewan	200 ppm TWA; 250 ppm STEL, Potentially harmful after absorption through skin or mucous membranes
Yukon	200 ppm TWA ; 260 mg/m3 TWA; 250 ppm STEL ; 310 mg/m3 STEL; Skin notation

ACGIH	200 ppm TWA, 250 ppm STEL, Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA Final	200 ppm TWA; 260 mg/m3 TWA
OSHA Vacated	200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 STEL; Prevent or reduce skin absorption
NIOSH	200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 STEL; Potential for dermal absorption
Isopropyl alcohol	**67-63-0**
Alberta	200 ppm TWA ; 492 mg/m3 TWA; 400 ppm STEL ; 984 mg/m3 STEL
British Columbia, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	200 ppm TWA; 400 ppm STEL
Manitoba	200 ppm TWA
New Brunswick	400 ppm TWA ; 983 mg/m3 TWA; 500 ppm STEL ; 1230 mg/m3 STEL
Quebec	400 ppm TWAEV ; 985 mg/m3 TWAEV; 500 ppm STEV ; 1230 mg/m3 STEV
Yukon	400 ppm TWA ; 980 mg/m3 TWA; 500 ppm STEL ; 1225 mg/m3 STEL; Skin notation
ACGIH	200 ppm TWA, 400 ppm STEL
OSHA Final	400 ppm TWA; 980 mg/m3 TWA
OSHA Vacated, NIOSH	400 ppm TWA; 980 mg/m3 TWA; 500 ppm STEL; 1225 mg/m3 STEL
Acetone	**67-64-1**
Alberta	500 ppm TWA ; 1200 mg/m3 TWA; 750 ppm STEL ; 1800 mg/m3 STEL
British Columbia, Nova Scotia, Prince Edward Island	250 ppm TWA; 500 ppm STEL
Manitoba	250 ppm TWA
New Brunswick	500 ppm TWA ; 1188 mg/m3 TWA; 750 ppm STEL ; 1782 mg/m3 STEL
Northwest Territories, Nunavut, Ontario, Saskatchewan	500 ppm TWA; 750 ppm STEL
Quebec	500 ppm TWAEV ; 1190 mg/m3 TWAEV, 1000 ppm STEV ; 2380 mg/m3 STEV
Yukon	1000 ppm TWA ; 2400 mg/m3 TWA, 1250 ppm STEL ; 3000 mg/m3 STEL
ACGIH	250 ppm TWA, 500 ppm STEL
OSHA Final	1000 ppm TWA; 2400 mg/m3 TWA
OSHA Vacated	750 ppm TWA; 1800 mg/m3 TWA 2400 mg/m3 STEL (The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors); 1000 ppm STEL
NIOSH	250 ppm TWA; 590 mg/m3 TWA

n-Propyl alcohol	**71-23-8**
Alberta	200 ppm TWA ; 492 mg/m3 TWA, 400 ppm STEL ; 984 mg/m3 STEL
British Columbia, Nova Scotia, Ontario, Prince Edward Island	100 ppm TWA
Manitoba	100 ppm TWA, Skin - potential for cutaneous absorption
New Brunswick	200 ppm TWA ; 492 mg/m3 TWA, 250 ppm STEL ; 614 mg/m3 STEL, Skin - potential for cutaneous absorption
Northwest Territories, Nunavut, Saskatchewan	200 ppm TWA, 400 ppm STEL
Quebec	200 ppm TWAEV ; 492 mg/m3 TWAEV , 50 ppm STEV ; 614 mg/m3 STEV, Skin designation
Yukon	200 ppm TWA ; 500 mg/m3 TWA; 250 ppm STEL ; 625 mg/m3 STEL; Skin notation
ACGIH	100 ppm TWA
OSHA Final	200 ppm TWA; 500 mg/m3 TWA
OSHA Vacated	200 ppm TWA; 500 mg/m3 TWA; 250 ppm STEL; 625 mg/m3 STEL
NIOSH	200 ppm TWA; 500 mg/m3 TWA; 250 ppm STEL; 625 mg/m3 STEL; Potential for dermal absorption
n-Butyl alcohol	**71-36-3**
Alberta	20 ppm TWA ; 60 mg/m3 TWA
British Columbia	15 ppm TWA; 30 ppm Ceiling
Manitoba	20 ppm TWA; Skin - potential for cutaneous absorption
New Brunswick	50 ppm Ceiling ; 152 mg/m3 Ceiling; Skin - potential for cutaneous absorption
Northwest Territories, Nunavut, Saskatchewan	20 ppm TWA; 30 ppm STEL
Nova Scotia, Ontario, Prince Edward Island	20 ppm TWA
Quebec	50 ppm Ceiling ; 152 mg/m3 Ceiling, Skin designation
Yukon	Skin notation
ACGIH	20 ppm TWA
OSHA Final	100 ppm TWA; 300 mg/m3 TWA
OSHA Vacated	50 ppm Ceiling; 150 mg/m3 Ceiling, Prevent or reduce skin absorption
NIOSH	50 ppm Ceiling; 150 mg/m3 Ceiling; Potential for dermal absorption
Methyl ethyl ketone	**78-93-3**
Alberta, New Brunswick	200 ppm TWA ; 590 mg/m3 TWA; 300 ppm STEL ; 885 mg/m3 STEL
British Columbia	50 ppm TWA; 100 ppm STEL

Manitoba	200 ppm TWA
Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	200 ppm TWA; 300 ppm STEL
Quebec	50 ppm TWAEV ; 150 mg/m3 TWAEV; 100 ppm STEV ; 300 mg/m3 STEV
Yukon	200 ppm TWA ; 590 mg/m3 TWA 250 ppm STEL ; 740 mg/m3 STEL
ACGIH	200 ppm TWA; 300 ppm STEL
OSHA Final	200 ppm TWA; 590 mg/m3 TWA
OSHA Vacated, NIOSH	200 ppm TWA; 590 mg/m3 TWA; 300 ppm STEL; 885 mg/m3 STEL
Ethylene glycol	**107-21-1**
Alberta	100 mg/m3 Ceiling
British Columbia	10 mg/m3 TWA particulate, 100 mg/m3 Ceiling aerosol ; 50 ppm Ceiling vapour,20 mg/m3 STEL particulate
Manitoba, New Brunswick, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	100 mg/m3 Ceiling aerosol only
Quebec	50 ppm Ceiling mist and vapor ; 127 mg/m3 Ceiling mist and vapor
Yukon	10 mg/m3 TWA particulate ; 100 ppm TWA vapor ; 250 mg/m3 TWA vapor; 10 ppm STEL particulate ; 20 mg/m3 STEL particulate ; 125 ppm STEL vapor ; 325 mg/m3 STEL vapor
ACGIH	100 mg/m3 Ceiling aerosol only
OSHA Vacated	50 ppm Ceiling; 125 mg/m3 Ceiling
Methyl n-amyl ketone	**110-43-0**
Alberta, New Brunswick	50 ppm TWA ; 233 mg/m3 TWA
British Columbia, Manitoba, Nova Scotia, Prince Edward Island	50 ppm TWA
Northwest Territories, Nunavut, Saskatchewan	50 ppm TWA; 60 ppm STEL
Ontario	25 ppm TWA ; 115 mg/m3 TWA
Quebec	50 ppm TWAEV ; 233 mg/m3 TWAEV
Yukon	100 ppm TWA ; 465 mg/m3 TWA, 150 ppm STEL ; 710 mg/m3 STEL
ACGIH	50 ppm TWA
OSHA Final, OSHA Vacated, NIOSH	100 ppm TWA; 465 mg/m3 TWA
Cyclohexanol	**108-93-0**
Alberta	50 ppm TWA ; 205 mg/m3 TWA; Substance may be readily absorbed through intact skin

British Columbia	50 ppm TWA; Skin notation
Manitoba	50 ppm TWA; Skin - potential for cutaneous absorption Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	50 ppm TWA ; 206 mg/m3 TWA, Skin - potential for cutaneous absorption
Northwest Territories Nunavut	50 ppm TWA; 62 ppm STEL; Skin notation
Nova Scotia	50 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
Ontario	50 ppm TWA; Danger of cutaneous absorption
Prince Edward Island	50 ppm TWA
Quebec	50 ppm TWAEV ; 206 mg/m3 TWAEV; Skin designation
Saskatchewan	50 ppm TWA; 62 ppm STEL; Potentially harmful after absorption through skin or mucous membranes
Yukon	50 ppm TWA ; 200 mg/m3 TWA; 50 ppm STEL ; 200 mg/m3 STEL
ACGIH	50 ppm TWA;Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA Final	50 ppm TWA; 200 mg/m3 TWA
OSHA Vacated	50 ppm TWA; 200 mg/m3 TWA, Prevent or reduce skin absorption
NIOSH	50 ppm TWA; 200 mg/m3 TWA, Potential for dermal absorption
Cyclohexanone	**108-94-1**
Alberta	20 ppm TWA ; 80 mg/m3 TWA, 50 ppm STEL ; 200 mg/m3 STEL Substance may be readily absorbed through intact skin
British Columbia, Northwest Territories, Nunavut	20 ppm TWA; Skin notation; 50 ppm STEL
Manitoba	20 ppm TWA; Skin - potential for cutaneous absorption Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	25 ppm TWA ; 100 mg/m3 TWA; Skin - potential for cutaneous absorption
Nova Scotia	20 ppm TWA; 50 ppm STEL, Skin - potential significant contribution to overall exposure by the cutaneous route
Ontario	20 ppm TWA, 50 ppm STEL, Danger of cutaneous absorption
Prince Edward Island	20 ppm TWA; 50 ppm STEL
Quebec	25 ppm TWAEV ; 100 mg/m3 TWAEV; Skin designation
Saskatchewan	20 ppm TWA, 50 ppm STEL, Potentially harmful after absorption through skin or mucous membranes
Yukon	50 ppm TWA ; 200 mg/m3 TWA, 50 ppm STEL ; 200 mg/m3 STEL
ACGIH	20 ppm TWA; 50 ppm STEL Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA Final	50 ppm TWA; 200 mg/m3 TWA
OSHA Vacated	25 ppm TWA; 100 mg/m3 TWA, Prevent or reduce skin absorption
NIOSH	50 ppm TWA; 200 mg/m3 TWA, Potential for dermal absorption
Hexone	**108-10-1**
Alberta, New Brunswick	50 ppm TWA ; 205 mg/m3 TWA, 75 ppm STEL ; 307 mg/m3 STEL
British Columbia, Nova Scotia, Ontario, Prince Edward Island	20 ppm TWA, 75 ppm STEL
Manitoba	20 ppm TWA
Northwest Territories, Nunavut, Saskatchewan	50 ppm TWA; 75 ppm STEL
Quebec	50 ppm TWAEV ; 205 mg/m3 TWAEV, 75 ppm STEV ; 307 mg/m3 STEV
Yukon	100 ppm TWA ; 410 mg/m3 TWA; 125 ppm STEL ; 510 mg/m3 STEL, Skin notation
ACGIH	20 ppm TWA; 75 ppm STEL
OSHA Final	100 ppm TWA; 410 mg/m3 TWA
OSHA Vacated, NIOSH	50 ppm TWA; 205 mg/m3 TWA; 75 ppm STEL; 300 mg/m3 STEL
1,1,1-Trichloroethane	**71-55-6**
Alberta, New Brunswick	350 ppm TWA ; 1910 mg/m3 TWA; 450 ppm STEL ; 2460 mg/m3 STEL
British Columbia, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	350 ppm TWA; 450 ppm STEL
Manitoba	350 ppm TWA
Quebec	350 ppm TWAEV ; 1910 mg/m3 TWAEV, 450 ppm STEV ; 2460 mg/m3 STEV
Yukon	350 ppm TWA ; 1900 mg/m3 TWA; 440 ppm STEL ; 2400 mg/m3 STEL
ACGIH	350 ppm TWA, 450 ppm STEL
OSHA Final	350 ppm TWA; 1900 mg/m3 TWA
OSHA Vacated	350 ppm TWA; 1900 mg/m3 TWA; 450 ppm STEL; 2450 mg/m3 STEL
NIOSH	350 ppm Ceiling (15 min); 1900 mg/m3 Ceiling (15 min)
Methylene chloride	**75-09-2**
Alberta, New Brunswick	50 ppm TWA ; 174 mg/m3 TWA
British Columbia	25 ppm TWA
Manitoba, Nova Scotia, Ontario, Prince Edward Island	50 ppm TWA
Northwest Territories, Nunavut, Saskatchewan	50 ppm TWA, 75 ppm STEL (regulated under Dichloromethane); 63 ppm STEL
Quebec	50 ppm TWAEV ; 174 mg/m3 TWAEV

Yukon	200 ppm TWA ; 700 mg/m3 TWA ; 720 mg/m3 TWA (regulated under Dichloromethane); 250 ppm STEL ; 870 mg/m3 STEL ; 200 ppm STEL (regulated under Dichloromethane); 720 mg/m3 STEL (regulated under Dichloromethane)
ACGIH	50 ppm TWA
OSHA Vacated	500 ppm TWA; 2000 ppm STEL (5 min in any 3 h) 1000 ppm Ceiling
OSHA Final	125 ppm STEL (See 29 CFR 1910.1052, 15 min); 12.5 ppm Action Level (See 29 CFR 1910.1052); 25 ppm TWA (See 29 CFR 1910.1052); 25 ppm TWA; 125 ppm STEL (see 29 CFR 1910.1052)
Trichloroethene	**79-01-6**
Alberta, New Brunswick	50 ppm TWA ; 269 mg/m3 TWA; 100 ppm STEL ; 537 mg/m3 STEL
British Columbia, Nova Scotia, Ontario, Prince Edward Island	10 ppm TWA; 25 ppm STEL
Manitoba	10 ppm TWA
Northwest Territories, Nunavut, Saskatchewan	50 ppm TWA; 100 ppm STEL
Quebec	50 ppm TWAEV ; 269 mg/m3 TWAEV; 200 ppm STEV ; 1070 mg/m3 STEV
Yukon	100 ppm TWA ; 535 mg/m3 TWA; 150 ppm STEL ; 800 mg/m3 STEL
ACGIH	10 ppm TWA; 25 ppm STEL
OSHA Final	100 ppm TWA; 200 ppm Ceiling
OSHA Vacated	50 ppm TWA; 270 mg/m3 TWA, 200 ppm STEL; 1080 mg/m3 STEL
Tetrachloroethylene	**127-18-4**
Alberta	25 ppm TWA ; 170 mg/m3 TWA; 100 ppm STEL ; 678 mg/m3 STEL
British Columbia, Northwest Territories, Nova Scotia, Nunavut; Ontario, Prince Edward Island, Saskatchewan	25 ppm TWA;100 ppm STEL
Manitoba	25 ppm TWA
New Brunswick	25 ppm TWA ; 170 mg/m3 TWA; 100 ppm STEL ; 685 mg/m3 STEL
Quebec	25 ppm TWAEV ; 170 mg/m3 TWAEV; 100 ppm STEV ; 685 mg/m3 STEV
Yukon	100 ppm TWA ; 670 mg/m3 TWA; 150 ppm STEL ; 1000 mg/m3 STEL; Skin notation
ACGIH	25 ppm TWA; 100 ppm STEL
n-Butyl acetate	**123-86-4**
Alberta, New Brunswick	150 ppm TWA ; 713 mg/m3 TWA; 200 ppm STEL ; 950 mg/m3 STEL
British Columbia	20 ppm TWA
Manitoba	50 ppm TWA

Northwest Territories, Nunavut, Ontario, Saskatchewan	150 ppm TWA; 200 ppm STEL
Nova Scotia, Prince Edward Island	50 ppm TWA; 150 ppm STEL
Quebec	150 ppm TWAEV ; 713 mg/m3 TWAEV; 200 ppm STEV ; 950 mg/m3 STEV
Yukon	150 ppm TWA ; 710 mg/m3 TWA; 200 ppm STEL ; 950 mg/m3 STEL
ACGIH	50 ppm TWA; 150 ppm STEL
OSHA Final	150 ppm TWA; 710 mg/m3 TWA
OSHA Vacated	150 ppm TWA; 710 mg/m3 TWA; 200 ppm STEL; 950 mg/m3 STEL
2-Ethoxyethanol	**110-80-5**
Alberta	0.1 ppm TWA (regulated under Ethylene glycol monoethyl ether); 0.4 mg/m3 TWA (regulated under Ethylene glycol monoethyl ether); 5 ppm TWA ; 18 mg/m3 TWA; Substance may be readily absorbed through intact skin
British Columbia	5 ppm TWA; Skin notation
Manitoba	5 ppm TWA; Skin - potential for cutaneous absorption Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	5 ppm TWA ; 18 mg/m3 TWA; Skin - potential for cutaneous absorption
Northwest Territories, Nunavut	5 ppm TWA; 7 ppm STEL; Skin notation
Nova Scotia	5 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
Ontario	5 ppm TWA; Danger of cutaneous absorption
Prince Edward Island	5 ppm TWA
Quebec	5 ppm TWAEV ; 18 mg/m3 TWAEV ; Skin designation
Saskatchewan	5 ppm TWA; 7 ppm STEL; Potentially harmful after absorption through skin or mucous membranes
Yukon	100 ppm TWA ; 370 mg/m3 TWA; 150 ppm STEL ; 560 mg/m3 STEL; Skin notation
ACGIH	5 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA Final, OSHA Vacated	200 ppm TWA; 740 mg/m3 TWA Prevent or reduce skin absorption
NIOSH	0.5 ppm TWA; 1.8 mg/m3 TWA Potential for dermal absorption
Acetate, 2-butoxyethyl	**112-07-2**
Alberta	20 ppm TWA ; 131 mg/m3 TWA
British Columbia, Manitoba, Nova Scotia, Ontario, Prince Edward Island	20 ppm TWA
Northwest Territories, Nunavut, Saskatchewan	20 ppm TWA; 30 ppm STEL

ACGIH	20 ppm TWA
NIOSH	5 ppm TWA; 33 mg/m3 TWA
Acetate, ethyl	**141-78-6**
Alberta, New Brunswick	400 ppm TWA ; 1440 mg/m3 TWA
British Colombia	150 ppm TWA
Manitoba, Nova Scotia, Ontario, Prince Edward Island	400 ppm TWA
Northwest Territories, Nunavut, Saskatchewan	400 ppm TWA; 500 ppm STEL
Quebec	400 ppm TWAEV ; 1440 mg/m3 TWAEV
Yukon	400 ppm TWA ; 1400 mg/m3 TWA; 400 ppm STEL ; 1400 mg/m3 STEL
ACGIH	400 ppm TWA
OSHA Final, OSHA Vacated, NIOSH	400 ppm TWA; 1400 mg/m3 TWA
Methyl acetate	**79-20-9**
Alberta, New Brunswick	200 ppm TWA ; 606 mg/m3 TWA; 250 ppm STEL ; 757 mg/m3 STEL
British Colombia, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	200 ppm TWA; 250 ppm STEL
Manitoba	200 ppm TWA
Quebec	200 ppm TWAEV ; 606 mg/m3 TWAEV; 250 ppm STEV ; 757 mg/m3 STEV
Yukon	200 ppm TWA ; 610 mg/m3 TWA; 250 ppm STEL ; 760 mg/m3 STEL
ACGIH	200 ppm TWA; 250 ppm STEL
OSHA Final	200 ppm TWA; 610 mg/m3 TWA
OHSA Vacated, NIOSH	200 ppm TWA; 610 mg/m3 TWA 250 ppm STEL; 760 mg/m3 STEL
Isopropyl acetate	**108-21-4**
Alberta	100 ppm TWA ; 416 mg/m3 TWA; 200 ppm STEL ; 832 mg/m3 STEL
British Columbia, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	100 ppm TWA; 200 ppm STEL
Manitoba	100 ppm TWA
New Brunswick	250 ppm TWA ; 1040 mg/m3 TWA; 310 ppm STEL ; 1290 mg/m3 STEL
Quebec	250 ppm TWAEV ; 1040 mg/m3 TWAEV; 310 ppm STEV ; 1290 mg/m3 STEV
Yukon	250 ppm TWA ; 950 mg/m3 TWA; 310 ppm STEL ; 1185 mg/m3 STEL

ACGIH	100 ppm TWA; 200 ppm STEL
OSHA Final	250 ppm TWA; 950 mg/m3 TWA
OSHA Vacated	250 ppm TWA; 950 mg/m3 TWA; 310 ppm STEL; 1185 mg/m3 STEL
n-Propyl acetate	**109-60-4**
Alberta	200 ppm TWA ; 835 mg/m3 TWA; 250 ppm STEL ; 1040 mg/m3 STEL
British Columbia, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	200 ppm TWA; 250 ppm STEL
Manitoba	200 ppm TWA
New Brunswick	200 ppm TWA ; 835 mg/m3 TWA; 250 ppm STEL ; 1040 mg/m3 STEL
Quebec	200 ppm TWAEV ; 835 mg/m3 TWAEV; 250 ppm STEV ; 1040 mg/m3 STEV
Yukon	200 ppm TWA ; 840 mg/m3 TWA; 250 ppm STEL ; 1050 mg/m3 STEL
ACGIH	200 ppm TWA;250 ppm STEL
OSHA Final	200 ppm TWA; 840 mg/m3 TWA
OSHA Vacated, NIOSH	200 ppm TWA; 840 mg/m3 TWA 250 ppm STEL; 1050 mg/m3 STEL
2-Methoxyethyl acetate	**110-49-6**
Alberta	0.1 ppm TWA ; 0.5 mg/m3 TWA; Substance may be readily absorbed through intact skin
British Columbia	0.1 ppm TWA; Skin notation
Manitoba	0.1 ppm TWA; Skin - potential for cutaneous absorption; Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	5 ppm TWA ; 24 mg/m3 TWA; Skin - potential for cutaneous absorption
Northwest Territories, Nunavut	5 ppm TWA; 8 ppm STEL; Skin notation
Nova Scotia	0.1 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
Ontario	0.1 ppm TWA; Danger of cutaneous absorption
Prince Edward Island	0.1 ppm TWA
Quebec	5 ppm TWAEV ; 24 mg/m3 TWAEV; Skin designation
Saskatchewan	5 ppm TWA; 8 ppm STEL; Potentially harmful after absorption through skin or mucous membranes
Yukon	25 ppm TWA ; 120 mg/m3 TWA; 35 ppm STEL ; 150 mg/m3 STEL Skin notation
ACGIH	0.1 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA Final, OSHA Vacated	25 ppm TWA; 120 mg/m3 TWA; prevent or reduce skin absorption
NIOSH	0.1 ppm TWA; 0.5 mg/m3 TWA; Potential for dermal absorption
2-Methoxyethanol	**109-86-4**
Alberta	0.1 ppm TWA ; 0.3 mg/m3 TWA; Substance may be readily absorbed through intact skin
British Columbia	0.1 ppm TWA; Skin notation
Manitoba	0.1 ppm TWA; Skin - potential for cutaneous absorption Skin - potential significant contribution to overall exposure by the cutaneous route
New Brunswick	5 ppm TWA ; 16 mg/m3 TWA; Skin - potential for cutaneous absorption
Northwest Territories, Nunavut	5 ppm TWA; 8 ppm STEL; Skin notation
Nova Scotia	0.1 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
Ontario	0.1 ppm TWA; Danger of cutaneous absorption
Prince Edward Island	0.1 ppm TWA
Quebec	5 ppm TWAEV ; 16 mg/m3 TWAEV; Skin designation
Saskatchewan	5 ppm TWA; 8 ppm STEL; Potentially harmful after absorption through skin or mucous membranes
Yukon	25 ppm TWA ; 80 mg/m3 TWA; 35 ppm STEL ; 120 mg/m3 STEL Skin notation
ACGIH	0.1 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA Final, OSHA Vacated	25 ppm TWA; 80 mg/m3 TWA; prevent or reduce skin absorption
NIOSH	0.1 ppm TWA; 0.3 mg/m3 TWA; Potential for dermal absorption
Propylene glycol monomethyl ether	**107-98-2**
Alberta, New Brunswick	100 ppm TWA ; 369 mg/m3 TWA; 150 ppm STEL ; 553 mg/m3 STEL
British Columbia	50 ppm TWA; 75 ppm STEL
Manitoba	50 ppm TWA
Northwest Territories, Nunavut, Saskatchewan	100 ppm TWA; 150 ppm STEL
Nova Scotia, Ontario, Prince Edward Island	50 ppm TWA; 100 ppm STEL
Quebec	100 ppm TWAEV ; 369 mg/m3 TWAEV; 150 ppm STEV ; 553 mg/m3 STEV
Yukon	100 ppm TWA ; 360 mg/m3 TWA; 150 ppm STEL ; 450 mg/m3 STEL
ACGIH:	50 ppm TWA; 100 ppm STEL
OSHA Vacated, NIOSH	100 ppm TWA; 360 mg/m3 TWA; 150 ppm STEL; 540 mg/m3 STEL
Vinyl acetate	**108-05-4**

Alberta, New Brunswick	10 ppm TWA ; 35 mg/m3 TWA; 15 ppm STEL ; 53 mg/m3 STEL
British Columbia, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Saskatchewan	10 ppm TWA; 15 ppm STEL
Manitoba	10 ppm TWA
Quebec	10 ppm TWAEV ; 35 mg/m3 TWAEV; 15 ppm STEV ; 53 mg/m3 STEV
Yukon	10 ppm TWA ; 30 mg/m3 TWA; 20 ppm STEL ; 60 mg/m3 STEL
ACGIH:	10 ppm TWA; 15 ppm STEL

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

Toluene (108-88-3)
0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene ; 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene ; 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)
Phenol (108-95-2)
250 mg/g creatinine Medium: urine Time: end of shift Parameter: Phenol with hydrolysis (background, nonspecific)
Benzene, ethyl- (100-41-4)
0.15 g/g creatinine Medium: urine Time: end of shift Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific)
Styrene (100-42-5)
400 mg/g creatinine Medium: urine Time: end of shift Parameter: Mandelic acid plus phenylglyoxylic acid (nonspecific); 40 µg/L Medium: urine Time: end of shift Parameter: Styrene
Benzene (71-43-2)
25 µg/g creatinine Medium: urine Time: end of shift Parameter: S-Phenylmercapturic acid (background); 500 µg/g creatinine Medium: urine Time: end of shift Parameter: t,t-Muconic acid (background)
Naphthalene (91-20-3)
Time: end of shift Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis (nonquantitative, nonspecific)
Xylenes (o-, m-, p- isomers) (1330-20-7)
1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
Hexane (110-54-3)
0.5 mg/L Medium: urine Time: end of shift Parameter: 2,5-Hexanedione without hydrolysis
Methyl alcohol (67-56-1)
15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
Isopropyl alcohol (67-63-0)
40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background,nonspecific)
Acetone (67-64-1)
25 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
Methyl ethyl ketone (78-93-3)
2 mg/L Medium: urine Time: end of shift Parameter: MEK (nonspecific)
Cyclohexanol (108-93-0)
Medium: urine Time: end of shift at end of workweek Parameter: 1,2-Cyclohexanediol with hydrolysis (nonquantitative, nonspecific); Medium: urine Time: end of shift Parameter: Cyclohexanol with hydrolysis (nonquantitative, nonspecific)
Cyclohexanone (108-94-1)
80 mg/L Medium: urine Time: end of shift at end of workweek Parameter: 1,2-Cyclohexanediol with hydrolysis (nonspecific, semi-quantitative); 8 mg/L Medium: urine Time: end of shift Parameter: Cyclohexanol with hydrolysis (nonspecific, semi-quantitative)
Hexone (108-10-1)
1 mg/L Medium: urine Time: end of shift Parameter: MIBK
1,1,1-Trichloroethane (71-55-6)
40 ppm Medium: end-exhaled air Time: prior to last shift of workweek Parameter: Methyl chloroform ; 10 mg/L Medium: urine Time: end of workweek Parameter: Trichloroacetic acid (nonspecific, semi-quantitative); 30 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Total trichloroethanol (nonspecific, semi-quantitative); 1 mg/L Medium: blood Time: end of shift at end of workweek Parameter: Total trichloroethanol (nonspecific)
Methylene chloride (75-09-2)
0.3 mg/L Medium: urine Time: end of shift Parameter: Dichloromethane (semi-quantitative)
Trichloroethene (79-01-6)
15 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Trichloroacetic acid (nonspecific); 0.5 mg/L Medium: blood Time: end of shift at end of workweek Parameter: Trichloroethanol without hydrolysis (nonspecific); Medium: blood Time: end of shift at end of workweek Parameter: Trichloroethylene (semi-quantitative); Medium: end-exhaled air Time: end of shift at end of workweek Parameter: Trichloroethylene (semi-quantitative)
Tetrachloroethylene (127-18-4)
3 ppm Medium: end-exhaled air Time: prior to shift Parameter: Tetrachloroethylene ; 0.5 mg/L Medium: blood Time: prior to shift Parameter: Tetrachloroethylene
2-Ethoxyethanol (110-80-5)

100 mg/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: 2-Ethoxyacetic acid
2-Methoxyethyl acetate (110-49-6)
1 mg/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: 2-Methoxyacetic acid
2-Methoxyethanol (109-86-4)
1 mg/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: 2-Methoxyacetic acid

Engineering Controls

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits. Use explosion-proof equipment. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Wear safety glasses. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Eye wash fountain and emergency showers are recommended. Contact lens use is not recommended.

Respiratory Protection

A respiratory protection program which meets USA's OSHA General Industry Standard 29 CFR 1910.134 or Canada's CSA Standard Z94.4-M1982 requirements must be followed whenever workplace conditions warrant a respirator's use. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

Glove Recommendations

Where skin contact is likely, wear impervious gloves. Use of natural rubber (latex) or equivalent gloves is not recommended. When product is heated and skin contact is likely, wear heat-insulating gloves, boots, and other protective clothing. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

Protective Materials

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, gloves, and lab coat or apron.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Black to dark brown liquid	**Physical State**	Liquid
Odor	Strong solvent odor	**Color**	dark brown to black
Odor Threshold	Not available	**pH**	6 - 10 (Typical)
Melting Point	Not available	**Boiling Point**	>38 °C (100 °F)
Boiling Point Range	Not available	**Freezing point**	Not available
Evaporation Rate	Not available	**Flammability (solid, gas)**	Not available
Autoignition Temperature	427 °C (800 °F Similar product)	**Flash Point**	<21 °C (70 °F)
Lower Explosive Limit	1 vol% (Similar product)	**Decomposition temperature**	Not available
Upper Explosive Limit	13 vol% (Similar product)	**Vapor Pressure**	60 - 100 mmHg @ 68ºF °C (20º C)
Vapor Density (air=1)	2 - 4 (Air = 1)	**Specific Gravity (water=1)**	0.85 - 1.2 (Water = 1)
Water Solubility	(Slight)	**Partition coefficient: n-octanol/water**	Not available
Viscosity	Not available	**Solubility (Other)**	Not available

Density	7.1 - 10 lb/gal (US)	**Volatile Organic Compounds (As regulated)**	80 - 100 wt% (664 to 830 g/L as per 40 CFR part 51.100(s))
Molecular Weight	Not available		

Section 10 - STABILITY AND REACTIVITY

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid sparks, or flame. Avoid contact with incompatible materials.

Incompatible Materials

Strong acids, strong oxidizing materials, alkalies, reducing agents, reactive halogens, or reactive metals.

Hazardous decomposition products

None under normal temperatures and pressures. See also SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.

Section 11 - TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation

Fatal if inhaled. May cause respiratory tract irritation. May cause drowsiness and dizziness.

Skin Contact

Toxic in contact with skin. Causes severe skin burns. May cause an allergic skin reaction.

Eye Contact

Causes serious eye damage.

Ingestion

Toxic if swallowed. Aspiration hazard.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Toluene (108-88-3)
Oral LD50 Rat 2600 mg/kg; Dermal LD50 Rabbit 12000 mg/kg; Inhalation LC50 Rat 12.5 mg/L 4 h

Phenol (108-95-2)
Oral LD50 Rat 340 mg/kg; Dermal LD50 Rabbit 630 mg/kg

Pentane (109-66-0)
Oral LD50 Rat >2000 mg/kg; Dermal LD50 Rabbit 3000 mg/kg; Inhalation LC50 Rat 364 g/m3 4 h

Benzene, ethyl- (100-41-4)
Oral LD50 Rat 3500 mg/kg; Dermal LD50 Rabbit 15400 mg/kg; Inhalation LC50 Rat 17.4 mg/L 4 h

Styrene (100-42-5)
Oral LD50 Rat 1000 mg/kg; Inhalation LC50 Rat 11.7 mg/L 4 h; Dermal LD50 Rat >2000 mg/kg (no deaths occurred)

Benzene (71-43-2)
Oral LD50 Rat 810 mg/kg; Dermal LD50 Rabbit >8200 mg/kg; Inhalation LC50 Rat 44.66 mg/L 4 h

Naphthalene (91-20-3)
Oral LD50 Rat 1110 mg/kg; Dermal LD50 Rabbit 1120 mg/kg; Inhalation LC50 Rat >340 mg/m3 1 h

Decane (124-18-5)
Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rat >2000 mg/kg (no deaths occurred); Inhalation LC50 Rat >1369 ppm 8 h (no deaths occurred)

Xylenes (o-, m-, p- isomers) (1330-20-7)
Oral LD50 Rat 3500 mg/kg; Dermal LD50 Rabbit >4350 mg/kg; Inhalation LC50 Rat 29.08 mg/L 4 h

Cyclohexane (110-82-7)

Oral LD50 Rat 12705 mg/kg; Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat 13.9 mg/L 4 h
Octane (111-65-9)
Inhalation LC50 Rat 118 g/m3 4 h
Nonane (111-84-2)
Inhalation LC50 Rat 3200 ppm 4 h
Hexane (110-54-3)
Oral LD50 Rat 25 g/kg; Dermal LD50 Rabbit 3000 mg/kg; Inhalation LC50 Rat 48000 ppm 4 h
Dodecane (112-40-3)
Inhalation LC50 Rat >142 ppm 8 h
Heptane (n-) (142-82-5)
Oral LD50 Mouse 5000 mg/kg; Dermal LD50 Rabbit 3000 mg/kg; Inhalation LC50 Rat 103 g/m3 4 h
1,2-Propylene glycol (57-55-6)
Oral LD50 Rat 20 g/kg; Dermal LD50 Rabbit 20800 mg/kg
Ethyl alcohol (64-17-5)
Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h
Methyl alcohol (67-56-1)
Oral LD50 Rat 6200 mg/kg; Inhalation LC50 Rat 22500 ppm 8 h
Isopropyl alcohol (67-63-0)
Oral LD50 Rat 1870 mg/kg; Dermal LD50 Rabbit 4059 mg/kg; Inhalation LC50 Rat 72600 mg/m3 4 h
Acetone (67-64-1)
Oral LD50 Rat 5800 mg/kg; Dermal LD50 Rabbit >15700 mg/kg; Inhalation LC50 Rat 50100 mg/m3 8 h
n-Propyl alcohol (71-23-8)
Oral LD50 Rat 1870 mg/kg; Dermal LD50 Rabbit 4049 mg/kg; Inhalation LC50 Rat >13548 ppm 4 h
n-Butyl alcohol (71-36-3)
Oral LD50 Rat 700 mg/kg; Dermal LD50 Rabbit 3402 mg/kg; Inhalation LC50 Rat >8000 ppm 4 h
Water (7732-18-5)
Oral LD50 Rat >90 mL/kg
Methyl ethyl ketone (78-93-3)
Oral LD50 Rat 2483 mg/kg; Dermal LD50 Rabbit 5000 mg/kg; Inhalation LC50 Rat 11700 ppm 4 h
Ethylene glycol (107-21-1)
Oral LD50 Rat 4700 mg/kg; Dermal LD50 Rat 10600 mg/kg
Methyl n-amyl ketone (110-43-0)
Oral LD50 Rat 1600 mg/kg; Dermal LD50 Rabbit 12.6 mL/kg; Inhalation LC50 Rat 2000 - 4000 ppm 6 h
Cyclohexanol (108-93-0)
Oral LD50 Rat 2.06 g/kg; Dermal LD50 Rabbit 501 - 794 mg/kg;Inhalation LC50 Rat >3.63 mg/L 4 h (no deaths occurred)
Cyclohexanone (108-94-1)
Oral LD50 Rat 1544 mg/kg;Dermal LD50 Rabbit 947 mg/kg;Inhalation LC50 Rat 8000 ppm 4 h
Hexone (108-10-1)
Oral LD50 Rat 2080 mg/kg;Dermal LD50 Rabbit 3000 mg/kg;Inhalation LC50 Rat 2000 – 4000 ppm 4 h
1,1,1-Trichloroethane (71-55-6)
Oral LD50 Rat 9600 mg/kg;Dermal LD50 Rabbit >15800 mg/kg;Inhalation LC50 Rat 18000 ppm 4 h
Methylene chloride (75-09-2)
Oral LD50 Rat 1600 mg/kg;Inhalation LC50 Rat 53 mg/L 6 h
Trichloroethene (79-01-6)
Oral LD50 Rat 4920 mg/kg;Dermal LD50 Rabbit 29000 mg/kg;Inhalation LC50 Rat 26 mg/L 4 h
Tetrachloroethylene (127-18-4)
Oral LD50 Rat 2629 mg/kg;Dermal LD50 Mouse 2800 mg/kg;Inhalation LC50 Rat 27.8 mg/L 4 h
n-Butyl acetate (123-86-4)
Oral LD50 Rat 10768 mg/kg;ermal LD50 Rabbit >17600 mg/kg;Inhalation LC50 Rat 390 ppm 4 h
2-Ethoxyethanol (110-80-5)
Oral LD50 Rat 2800 mg/kg;Dermal LD50 Rabbit 3300 mg/kg;Inhalation LC50 Rat 4267 ppm 4 h
Acetate, 2-butoxyethyl (112-07-2)
Oral LD50 Rat 2400 mg/kg;Dermal LD50 Rabbit 1500 mg/kg;Inhalation LC50 Rat >400 ppm 4 h
Acetate, ethyl (141-78-6)
Oral LD50 Rat 5620 mg/kg;Dermal LD50 Rabbit >18000 mg/kg;Inhalation LC50 Mouse 1500 ppm 4 h
Methyl acetate (79-20-9)
Oral LD50 Rat >5 g/kg;Dermal LD50 Rabbit >5 g/kg;Inhalation LC50 Rat 16000 ppm 4 h
Isopropyl acetate (108-21-4)
Oral LD50 Rat 3000 mg/kg;Dermal LD50 Rabbit >17436 mg/kg;Inhalation LC50 Rat 50600 mg/m3 8 h
n-Propyl acetate (109-60-4)
Oral LD50 Rat 8700 mg/kg;Dermal LD50 Rabbit >17756 mg/kg
2-Methoxyethyl acetate (110-49-6)
Oral LD50 Rat 3930 mg/kg;Dermal LD50 Rabbit 5214 mg/kg

2-Methoxyethanol (109-86-4)
Oral LD50 Rat 2370 mg/kg;Dermal LD50 Rabbit 1280 mg/kg;Inhalation LC50 Rat 1478 ppm 7 h
Propylene glycol monomethyl ether (107-98-2)
Oral LD50 Rat 5000 mg/kg;Dermal LD50 Rabbit 13 g/kg;Inhalation LC50 Rat >7559 ppm 6 h (no deaths occurred)
Vinyl acetate (108-05-4)
Oral LD50 Rat 2900 mg/kg;Dermal LD50 Rabbit 2335 mg/kg;Inhalation LC50 Rat 11400 mg/m3 4 h

Product Toxicity Data

Acute Toxicity Estimate

Dermal	683.51 mg/kg
Inhalation - Vapor	0.4121 mg/L
Oral	378.8387 mg/kg

Immediate Effects

Fatal if inhaled, toxic on contact with skin, toxic if swallowed, aspiration hazard, blood system disorders, central nervous system damage, central nervous system depression, circulatory system damage, eye damage, heart damage, kidney damage, liver damage, nervous system damage, respiratory system damage, respiratory tract irritation, skin damage, systemic toxicity, retina damage, testes damage.

Delayed Effects

Cancer, reproductive effects, mutagenic effects, central nervous system damage, circulatory system damage, bone damage, blood disorders, eye damage, kidney damage, liver damage, lung damage, skin sensitizer, nervous system damage, retina damage, cardiovascular system damage, digestive system damage, spleen damage, thymus damage, hematopoietic system damage, autonomic nervous system damage, ear damage, heart damage, testes damage.

Irritation/Corrosivity Data

Causes skin burns, eye burns, respiratory tract irritation.

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

May cause sensitization.

Component Carcinogenicity

Toluene (108-88-3), Phenol (108-95-2), Xylenes (o-, m-, p- isomers) (1330-20-7), Cyclohexanone (108-94-1)	
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999] ; Monograph 47 [1989] (Group 3 (not classifiable))
Benzene, ethyl-	**100-41-4**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present
Styrene	**100-42-5**
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 82 [2002] ; Monograph 60 [1994] (Group 2B (possibly carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present

Benzene	**71-43-2**
ACGIH:	A1 - Confirmed Human Carcinogen
IARC:	Monograph 100F [2012] ; Supplement 7 [1987] ; Monograph 29 [1982] (Group 1 (carcinogenic to humans))
NTP:	Known Human Carcinogen
OSHA:	Present; see 29 CFR 1910.1028
NIOSH:	potential occupational carcinogen
Naphthalene	**91-20-3**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present
Ethyl alcohol	**64-17-5**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 100E [2012] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages) (Group 1 (carcinogenic to humans))
OSHA:	Present
Isopropyl alcohol	**67-63-0**
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999] ; Supplement 7 [1987] ; Monograph 15 [1977] (Group 3 (not classifiable))
Acetone (67-64-1), n-Propyl alcohol (71-23-8), Ethylene glycol (107-21-1), Propylene glycol monomethyl ether (107-98-2)	
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
Hexone	**108-10-1**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 101 [2013] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present
1,1,1-Trichloroethane	**71-55-6**
ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999] ; Supplement 7 [1987] ; Monograph 20 [1979] (Group 3 (not classifiable))
Methylene chloride	**75-09-2**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC:	Monograph 110 [in preparation] ; Monograph 71 [1999] (Group 2A (probably carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present see 29 CFR 1910.1052
NIOSH:	potential occupational carcinogen
Trichloroethene	**79-01-6**
ACGIH:	A2 - Suspected Human Carcinogen
IARC:	Monograph 106 [2014] ; Monograph 63 [1995] (Group 1 (carcinogenic to humans))
NTP:	Known Human Carcinogen
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present
NIOSH:	potential occupational carcinogen
Tetrachloroethylene	**127-18-4**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 106 [2014] ; Monograph 63 [1995] ; Supplement 7 [1987] (Group 2A (probably carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
OSHA:	Present
NIOSH:	potential occupational carcinogen
Acetate, 2-butoxyethyl	**112-07-2**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Vinyl acetate	**108-05-4**
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 63 [1995] ; Supplement 7 [1987] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present

Germ Cell Mutagenicity

Mutagenic effect

Tumorigenic Data

No information available for the product.

Reproductive Toxicity

Available data characterizes this substance as a reproductive hazard.

Specific Target Organ Toxicity - Single Exposure

Eye, blood, central nervous system, circulatory system, heart, kidneys, liver, nervous system, respiratory system, testes, retina, systemic toxicity.

Specific Target Organ Toxicity - Repeated Exposure

Eye, blood, central nervous system, circulatory system, cardiosvascular system, heart, kidneys, liver, lungs, nervous system, respiratory system, spleen, testes, bones, digestive system, hematopoietic system, autonomic nervous system, thymus, retina, ears.

Aspiration hazard

This material is an aspiration hazard.

Medical Conditions Aggravated by Exposure

Medical conditions may include eye, skin, liver, lungs, kidneys, and/or central nervous system disorders, blood disorders, cardiovascular system disorders, hearing or inner ear disorders, nervous system disorders, respiratory disorders, systemic disorders, heart disorders, bone disorders, autonomic nervous system disorders, hematopoietic system disorders, thymus disorders, spleen disorders, testes disorders.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Component Analysis - Aquatic Toxicity

Toluene	**108-88-3**
Fish:	LC50 96 h Pimephales promelas 15.22 - 19.05 mg/L [flow-through] (1 day old); LC50 96 h Pimephales promelas 12.6 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.89 - 7.81 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 14.1 - 17.16 mg/L [static]; LC50 96 h Oncorhynchus mykiss 5.8 mg/L [semi-static]; LC50 96 h Lepomis macrochirus 11 - 15 mg/L [static]; LC50 96 h Oryzias latipes 54 mg/L [static]; LC50 96 h Poecilia reticulata 28.2 mg/L [semi-static]; LC50 96 h Poecilia reticulata 50.87 - 70.34 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >433 mg/L IUCLID ; EC50 72 h Pseudokirchneriella subcapitata 12.5 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 5.46 - 9.83 mg/L [Static] EPA ; EC50 48 h Daphnia magna 11.5 mg/L IUCLID
Phenol	**108-95-2**
Fish:	LC50 96 h Pimephales promelas 11.9 - 50.5 mg/L [flow-through]; LC50 96 h Pimephales promelas 20.5 - 25.6 mg/L [static]; LC50 96 h Pimephales promelas 32 mg/L; LC50 96 h Oncorhynchus mykiss 5.449 - 6.789 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 7.5 - 14 mg/L [static]; LC50 96 h Oncorhynchus mykiss 4.23 - 7.49 mg/L [semi-static]; LC50 96 h Oncorhynchus mykiss 5 - 12 mg/L; LC50 96 h Lepomis macrochirus 13.5 mg/L [static]; LC50 96 h Lepomis macrochirus 11.9 - 25.3 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 11.5 mg/L [semi-static]; LC50 96 h Poecilia reticulata 34.09 - 47.64 mg/L [static]; LC50 96 h Poecilia reticulata 31 mg/L [semi-static]; LC50 96 h Brachydanio rerio 27.8 mg/L; LC50 96 h Cyprinus carpio 0.00175 mg/L [semi-static]; LC50 96 h Oryzias latipes 33.9 - 43.3 mg/L [flow-through]; LC50 96 h Oryzias latipes 23.4 - 36.6 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata 46.42 mg/L EPA ; EC50 96 h Pseudokirchneriella subcapitata 0.0188 - 0.1044 mg/L [static] EPA ; EC50 72 h Desmodesmus subspicatus 187 - 279 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 4.24 - 10.7 mg/L [Static] EPA ; EC50 48 h Daphnia magna 10.2 - 15.5 mg/L EPA
Pentane	**109-66-0**
Fish:	LC50 96 h Oncorhynchus mykiss 9.87 mg/L; LC50 96 h Pimephales promelas 11.59 mg/L; LC50 96 h Lepomis macrochirus 9.99 mg/L
Invertebrate:	EC50 48 h Daphnia magna 9.74 mg/L IUCLID
Benzene, ethyl-	**100-41-4**

Fish:	LC50 96 h Oncorhynchus mykiss 11 - 18 mg/L [static]; LC50 96 h Oncorhynchus mykiss 4.2 mg/L [semi-static]; LC50 96 h Pimephales promelas 7.55 - 11 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 32 mg/L [static]; LC50 96 h Pimephales promelas 9.1 - 15.6 mg/L [static]; LC50 96 h Poecilia reticulata 9.6 mg/L [static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata 4.6 mg/L IUCLID ; EC50 96 h Pseudokirchneriella subcapitata >438 mg/L IUCLID ; EC50 72 h Pseudokirchneriella subcapitata 2.6 - 11.3 mg/L [static] EPA ; EC50 96 h Pseudokirchneriella subcapitata 1.7 - 7.6 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 1.8 - 2.4 mg/L IUCLID
Styrene	**100-42-5**
Fish:	LC50 96 h Pimephales promelas 3.24 - 4.99 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 19.03 - 33.53 mg/L [static]; LC50 96 h Pimephales promelas 6.75 - 14.5 mg/L [static]; LC50 96 h Poecilia reticulata 58.75 - 95.32 mg/L [static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata 1.4 mg/L IUCLID ; EC50 96 h Pseudokirchneriella subcapitata 0.72 mg/L IUCLID ; EC50 72 h Pseudokirchneriella subcapitata 0.46 - 4.3 mg/L [static] EPA ; EC50 96 h Pseudokirchneriella subcapitata 0.15 - 3.2 mg/L [static] EPA
Invertebrate:	EC50 48 h Daphnia magna 3.3 - 7.4 mg/L EPA
Benzene	**71-43-2**
Fish:	LC50 96 h Pimephales promelas 10.7 - 14.7 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 5.3 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 22.49 mg/L [static]; LC50 96 h Poecilia reticulata 28.6 mg/L [static]; LC50 96 h Pimephales promelas 22330 - 41160 µg/L [static]; LC50 96 h Lepomis macrochirus 70000 - 142000 µg/L [static]
Algae:	EC50 72 h Pseudokirchneriella subcapitata 29 mg/L EPA
Invertebrate:	EC50 48 h Daphnia magna 8.76 - 15.6 mg/L [Static] EPA ; EC50 48 h Daphnia magna 10 mg/L IUCLID
Naphthalene	**91-20-3**
Fish:	LC50 96 h Pimephales promelas 5.74 - 6.44 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 1.6 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 0.91 - 2.82 mg/L [static]; LC50 96 h Pimephales promelas 1.99 mg/L [static]; LC50 96 h Lepomis macrochirus 31.0265 mg/L [static]
Invertebrate:	LC50 48 h Daphnia magna 2.16 mg/L IUCLID ; EC50 48 h Daphnia magna 1.96 mg/L [Flow through] EPA ; EC50 48 h Daphnia magna 1.09 - 3.4 mg/L [Static] EPA
Decane	**124-18-5**
Invertebrate:	EC50 48 h Daphnia magna 0.029 mg/L IUCLID
Xylenes (o-, m-, p-isomers)	**1330-20-7**
Fish:	LC50 96 h Pimephales promelas 13.4 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 2.661 - 4.093 mg/L [static]; LC50 96 h Oncorhynchus mykiss 13.5 - 17.3 mg/L; LC50 96 h Lepomis macrochirus 13.1 - 16.5 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 19 mg/L; LC50 96 h Lepomis macrochirus 7.711 - 9.591 mg/L [static]; LC50 96 h Pimephales promelas 23.53 - 29.97 mg/L [static]; LC50 96 h Cyprinus carpio 780 mg/L [semi-static]; LC50 96 h Cyprinus carpio >780 mg/L; LC50 96 h Poecilia reticulata 30.26 - 40.75 mg/L [static]
Invertebrate:	EC50 48 h water flea 3.82 mg/L; LC50 48 h Gammarus lacustris 0.6 mg/L
Cyclohexane	**110-82-7**

Fish:	LC50 96 h Pimephales promelas 3.96 - 5.18 mg/L [flow-through]; LC50 96 h Pimephales promelas 23.03 - 42.07 mg/L [static]; LC50 96 h Lepomis macrochirus 24.99 - 44.69 mg/L [static]; LC50 96 h Poecilia reticulata 48.87 - 68.76 mg/L [static]
Algae:	EC50 72 h Desmodesmus subspicatus >500 mg/L IUCLID
Octane	**111-65-9**
Invertebrate:	EC50 48 h water flea 0.38 mg/L
Hexane	**110-54-3**
Fish:	LC50 96 h Pimephales promelas 2.1 - 2.98 mg/L [flow-through]
Heptane (n-)	**142-82-5**
Fish:	LC50 96 h Cichlid fish 375 mg/L
1,2-Propylene glycol	**57-55-6**
Fish:	LC50 96 h Oncorhynchus mykiss 51600 mg/L [static]; LC50 96 h Oncorhynchus mykiss 41 - 47 mL/L [static]; LC50 96 h Pimephales promelas 51400 mg/L [static]; LC50 96 h Pimephales promelas 710 mg/L
Algae:	EC50 96 h Pseudokirchneriella subcapitata 19000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L [Static] EPA
Ethyl alcohol	**64-17-5**
Fish:	LC50 96 h Oncorhynchus mykiss 12 - 16 mL/L [static]; LC50 96 h Pimephales promelas >100 mg/L [static]; LC50 96 h Pimephales promelas 13400 - 15100 mg/L [flow-through]
Invertebrate:	LC50 48 h Daphnia magna 9268 - 14221 mg/L IUCLID ; EC50 48 h Daphnia magna 2 mg/L [Static] EPA
Methyl alcohol	**67-56-1**
Fish:	LC50 96 h Pimephales promelas 28200 mg/L [flow-through]; LC50 96 h Pimephales promelas >100 mg/L [static]; LC50 96 h Oncorhynchus mykiss 19500 - 20700 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 18 - 20 mL/L [static]; LC50 96 h Lepomis macrochirus 13500 - 17600 mg/L [flow-through]
Isopropyl alcohol	**67-63-0**
Fish:	LC50 96 h Pimephales promelas 9640 mg/L [flow-through]; LC50 96 h Pimephales promelas 11130 mg/L [static]; LC50 96 h Lepomis macrochirus >1400000 µg/L
Algae:	EC50 96 h Desmodesmus subspicatus >1000 mg/L IUCLID ; EC50 72 h Desmodesmus subspicatus >1000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 13299 mg/L IUCLID
Acetone	**67-64-1**
Fish:	LC50 96 h Oncorhynchus mykiss 4.74 - 6.33 mL/L; LC50 96 h Pimephales promelas 6210 - 8120 mg/L [static]; LC50 96 h Lepomis macrochirus 8300 mg/L
Invertebrate:	EC50 48 h Daphnia magna 10294 - 17704 mg/L [Static] EPA ; EC50 48 h Daphnia magna 12600 - 12700 mg/L IUCLID
n-Propyl alcohol	**71-23-8**

Fish:	LC50 96 h Pimephales promelas 4480 mg/L [flow-through]
Invertebrate:	EC50 48 h Daphnia magna 3642 mg/L IUCLID ; EC50 48 h Daphnia magna 3339 - 3977 mg/L [Static] EPA
n-Butyl alcohol	**71-36-3**
Fish:	LC50 96 h Pimephales promelas 1730 - 1910 mg/L [static]; LC50 96 h Pimephales promelas 1740 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 100000 - 500000 µg/L [static]; LC50 96 h Pimephales promelas 1910000 µg/L [static]
Algae:	EC50 96 h Desmodesmus subspicatus >500 mg/L IUCLID ; EC50 72 h Desmodesmus subspicatus >500 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 1983 mg/L IUCLID ; EC50 48 h Daphnia magna 1897 - 2072 mg/L [Static] EPA
Methyl ethyl ketone	**78-93-3**
Fish:	LC50 96 h Pimephales promelas 3130 - 3320 mg/L [flow-through]
Invertebrate:	EC50 48 h Daphnia magna >520 mg/L IUCLID ; EC50 48 h Daphnia magna 5091 mg/L IUCLID ; EC50 48 h Daphnia magna 4025 - 6440 mg/L [Static] EPA
Ethylene glycol	**107-21-1**
Fish:	LC50 96 h Oncorhynchus mykiss 41000 mg/L; LC50 96 h Oncorhynchus mykiss 14 - 18 mL/L [static]; LC50 96 h Lepomis macrochirus 27540 mg/L [static]; LC50 96 h Oncorhynchus mykiss 40761 mg/L [static]; LC50 96 h Pimephales promelas 40000 - 60000 mg/L [static]; LC50 96 h Poecilia reticulata 16000 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata 6500 - 13000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 46300 mg/L IUCLID
Methyl n-amyl ketone	**110-43-0**
Fish:	LC50 96 h Pimephales promelas 126 - 137 mg/L [flow-through]
Cyclohexanol	**108-93-0**
Fish:	LC50 96 h Pimephales promelas 704 mg/L [flow-through]; LC50 96 h Pimephales promelas 1033 mg/L [static]; LC50 96 h Lepomis macrochirus 1100 mg/L [static]
Algae:	EC50 72 h Desmodesmus subspicatus 29.2 mg/L IUCLID ; EC50 96 h Desmodesmus subspicatus 29 mg/L IUCLID
Cyclohexanone	**108-94-1**
Fish:	LC50 96 h Pimephales promelas 481 - 578 mg/L [flow-through]; LC50 96 h Pimephales promelas 8.9 mg/L
Hexone	**108-10-1**
Fish:	LC50 96 h Pimephales promelas 496 - 514 mg/L [flow-through]
Algae:	EC50 96 h Pseudokirchneriella subcapitata 400 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 170 mg/L IUCLID
1,1,1-Trichloroethane	**71-55-6**

Fish:	LC50 96 h Pimephales promelas 35.2 - 50.7 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 57 - 90 mg/L [static] (juvenile); LC50 96 h Cyprinus carpio 56 mg/L [flow-through]; LC50 96 h Poecilia reticulata 52.9 mg/L [flow-through]; LC50 96 h Poecilia reticulata 69.7 mg/L [static]; LC50 96 h Pimephales promelas 91 - 126 mg/L [static]; LC50 96 h Oncorhynchus mykiss 46 - 59 mg/L [static]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >500 mg/L EPA
Invertebrate:	LC50 48 h Daphnia magna >530 mg/L IUCLID ; EC50 48 h Daphnia magna 2384 mg/L IUCLID ; EC50 48 h Daphnia magna 9.7 - 12.8 mg/L [Static] EPA
Methylene chloride	**75-09-2**
Fish:	LC50 96 h Pimephales promelas 140.8 - 277.8 mg/L [flow-through]; LC50 96 h Pimephales promelas 262 - 855 mg/L [static]; LC50 96 h Lepomis macrochirus 193 mg/L [static]; LC50 96 h Lepomis macrochirus 193 mg/L [flow-through]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >500 mg/L EPA ; EC50 72 h Pseudokirchneriella subcapitata >500 mg/L EPA
Invertebrate:	EC50 48 h Daphnia magna 1532 - 1847 mg/L [Static] EPA ; EC50 48 h Daphnia magna 190 mg/L IUCLID
Trichloroethene	**79-01-6**
Fish:	LC50 96 h Pimephales promelas 31.4 - 71.8 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 39 - 54 mg/L [static]
Algae:	EC50 96 h Desmodesmus subspicatus 450 mg/L IUCLID ; EC50 96 h Pseudokirchneriella subcapitata 175 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 2.2 mg/L IUCLID
Tetrachloroethylene	**127-18-4**
Fish:	LC50 96 h Pimephales promelas 12.4 - 14.4 mg/L [flow-through]; LC50 96 h Pimephales promelas 8.6 - 13.5 mg/L [static]; LC50 96 h Lepomis macrochirus 11 - 15 mg/L [static]; LC50 96 h Oncorhynchus mykiss 4.73 - 5.27 mg/L [flow-through]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >500 mg/L EPA
Invertebrate:	EC50 48 h Daphnia magna 6.1 - 9 mg/L [Static] EPA
n-Butyl acetate	**123-86-4**
Fish:	LC50 96 h Lepomis macrochirus 100 mg/L [static]; LC50 96 h Pimephales promelas 17 - 19 mg/L [flow-through]
Algae:	EC50 72 h Desmodesmus subspicatus 674.7 mg/L IUCLID
2-Ethoxyethanol	**110-80-5**
Fish:	LC50 96 h Lepomis macrochirus >10000 mg/L [static]; LC50 96 h Pimephales promelas >0.1 mg/L [static]
Algae:	EC50 72 h Desmodesmus subspicatus >1000 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna >10000 mg/L IUCLID
Acetate, 2-butoxyethyl	**112-07-2**
Algae:	EC50 72 h Desmodesmus subspicatus >500 mg/L IUCLID

Invertebrate:	EC50 48 h Daphnia magna 37 mg/L IUCLID
Acetate, ethyl	**141-78-6**
Fish:	LC50 96 h Pimephales promelas 220 - 250 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 484 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 352 - 500 mg/L [semi-static]
Invertebrate:	EC50 48 h Daphnia magna 560 mg/L [Static] EPA
Methyl acetate	**79-20-9**
Fish:	LC50 96 h Pimephales promelas 295 - 348 mg/L [flow-through]; LC50 96 h Brachydanio rerio 250 - 350 mg/L [static]
Algae:	EC50 72 h Desmodesmus subspicatus >120 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 1026.7 mg/L IUCLID
n-Propyl acetate	**109-60-4**
Fish:	LC50 96 h Pimephales promelas 56 - 64 mg/L [flow-through]; LC50 96 h Pimephales promelas56 - 64 mg/L[static]
2-Methoxyethanol	**109-86-4**
Fish:	LC50 96 h Lepomis macrochirus 10000 mg/L [static]; LC50 96 h Lepomis macrochirus 9650 mg/L [static]; LC50 96 h Oncorhynchus mykiss 16000 mg/L [static]
Propylene glycol monomethyl ether	**107-98-2**
Fish:	LC50 96 h Pimephales promelas 20.8 g/L [static]
Invertebrate:	EC50 48 h Daphnia magna 23300 mg/L IUCLID
Vinyl acetate	**108-05-4**
Fish:	LC50 96 h Pimephales promelas 14 mg/L [static]; LC50 96 h Lepomis macrochirus 15.04 - 21.54 mg/L [static]; LC50 96 h Poecilia reticulata 26.1 - 36.63 mg/L [static]

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of in accordance with all applicable federal, state and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding proper recycling or disposal. This product is a RCRA (US EPA Resource Conservation and Recovery Act) hazardous waste and is subject to the RCRA manifesting requirements. You must test your waste using methods described in 40 CFR Part 261 to determine if it meets these or other applicable definitions of hazardous wastes. Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

Section 14 - TRANSPORT INFORMATION

US DOT Information:
Shipping Name: FLAMMABLE LIQUIDS, TOXIC, N.O.S., (Contains: Xylenes (o-, m-, p- isomers), , Tetrachloroethylene)
Hazard Class: 3
UN/NA #: UN1992
Packing Group: I
Required Label(s): 3, 6.1
Marine pollutant

TDG Information:
Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S., (Contains: Xylenes (o-, m-, p- isomers), , Tetrachloroethylene)
Hazard Class: 3
UN#: UN1992
Packing Group: I
Required Label(s): 3, 6.1
Marine pollutant

IATA Information:
Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S. , (Contains: Xylenes (o-, m-, p- isomers), , Tetrachloroethylene)
Hazard Class: 3
UN#: UN1992
Packing Group: I
Required Label(s): 3, 6.1
Marine pollutant

IMDG Information:
Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S. , (Contains: Xylenes (o-, m-, p- isomers), , Tetrachloroethylene)
Hazard Class: 3
UN#: UN1992
Packing Group: I
Required Label(s): 3, 6.1
Marine pollutant

International Bulk Chemical Code
This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Toluene	**108-88-3**
IBC Code:	Category Y
Phenol	**108-95-2**
IBC Code:	Category Y
Benzene, ethyl-	**100-41-4**

IBC Code:	Category Y
Styrene	**100-42-5**
IBC Code:	Category Y
Benzene	**71-43-2**
IBC Code:	Category Y ; Category Y (>=10% or more mixture ;for mixtures containing no other components with safety hazards and where the pollution category is Y or less)
Naphthalene	**91-20-3**
IBC Code:	Category X (molten)
Xylenes (o-, m-, p- isomers)	**1330-20-7**
IBC Code:	Category Y
Cyclohexane	**110-82-7**
IBC Code:	Category Y
Methyl alcohol	**67-56-1**
IBC Code:	Category Y
n-Propyl alcohol	**71-23-8**
IBC Code:	Category Y
Methyl ethyl ketone	**78-93-3**
IBC Code:	Category Z
Ethylene glycol	**107-21-1**
IBC Code:	Category Y
Methyl n-amyl ketone	**110-43-0**
IBC Code:	Category Z
Cyclohexanol	**108-93-0**
IBC Code:	Category Y
Cyclohexanone	**108-94-1**
IBC Code:	Category Z
Hexone	**108-10-1**
IBC Code:	Category Z
1,1,1-Trichloroethane	**71-55-6**
IBC Code:	Category Y

Methylene chloride	**75-09-2**
IBC Code:	Category Y
Trichloroethene	**79-01-6**
IBC Code:	Category Y
Tetrachloroethylene	**127-18-4**
IBC Code:	Category Y
Acetate, 2-butoxyethyl	**112-07-2**
IBC Code:	Category Y
Acetate, ethyl	**141-78-6**
IBC Code:	Category Z
Methyl acetate	**79-20-9**
IBC Code:	Category Z
Isopropyl acetate	**108-21-4**
IBC Code:	Category Z
n-Propyl acetate	**109-60-4**
IBC Code:	Category Y
2-Methoxyethyl acetate	**110-49-6**
IBC Code:	Category Y
Vinyl acetate	**108-05-4**
IBC Code:	Category Y

Section 15 - REGULATORY INFORMATION

Canada Regulations
CEPA - Priority Substances List

Toluene (108-88-3), Styrene (100-42-5), Xylenes (o-, m-, p- isomers) (1330-20-7)	
	Priority Substance List 1 (substance not considered toxic)
Phenol (108-95-2), Ethylene glycol (107-21-1), 2-Ethoxyethanol (110-80-5)	
	Priority Substance List 2 (substance not considered toxic)
Benzene (71-43-2), Methylene chloride (75-09-2), Trichloroethene (79-01-6), Tetrachloroethylene (127-18-4)	
	Priority Substance List 1 (substance considered toxic)
1,1,1-Trichloroethane (71-55-6)	

	Priority Substance List 1 (substance considered toxic, added to CEPA's Schedule 1, List of Toxic Substances)
2-Methoxyethanol	**109-86-4**
	Priority Substance List 2 (substance considered toxic, added to CEPA's Schedule 1, List of Toxic Substances)

Ozone Depleting Substances

1,1,1-Trichloroethane	**71-55-6**
Alberta	Present

Council of Ministers of the Environment - Soil Quality Guidelines

Toluene	**108-88-3**
Residential and Parkland	0.37 mg/kg coarse (surface (<=1.5 m); 0.08 mg/kg fine (surface (<=1.5 m); 0.37 mg/kg coarse (subsoil (>1.5 m; 0.08 mg/kg fine (subsoil (>1.5 m), Free-phase formation, a circumstance deemed unacceptable by many jurisdictions, occurs when a substance exceeds its solubility limit in soil water. The concentration at which this occurs is dependent on soil texture, porosity, and aeration porosity. Under the assumptions used for this guideline, at concentrations greater than 660 mg/kg in coarse soil, or 680 mg/kg in fine soil, formation of free-phase Toluene will likely occur)
Phenol	**108-95-2**
Residential and Parkland	3.8 mg/kg (dry weight)
Benzene, ethyl-	**100-41-4**
Residential and Parkland	0.082 mg/kg coarse (surface (<=1.5 m); 0.018 mg/kg fine (surface (<=1.5 m; 0.082 mg/kg coarse (subsoil (>1.5 m; 0.018 mg/kg fine (subsoil (>1.5 m). These values may be less than the common limit of detection in some jurisdictions. Free-phase formation, a circumstance deemed unacceptable by many jurisdictions, occurs when a substance exceeds its solubility limit in soil water. The concentration at which this occurs is dependent on soil texture, porosity, and aeration porosity. Under the assumptions used for this guideline, at concentrations greater than 430 mg/kg soil, formation of free-phase Ethylbenzene will likely occur.
Styrene	**100-42-5**
Residential and Parkland	5 mg/kg (dry weight)
Benzene	**71-43-2**
Residential and Parkland	0.03 mg/kg coarse (surface (<=1.5 m 0o; 0.0068 mg/kg fine (surface (<=1.5 m); 0.03 mg/kg coarse (subsoil (>1.5 m); 0.0068 mg/kg fine (subsoil (>1.5 m); 0.0095 mg/kg coarse (surface (<=1.5 m); 0.0068 mg/kg fine (surface (<=1.5 m); 0.011 mg/kg coarse (subsoil (>1.5 m); 0.0068 mg/kg fine (subsoil (>1.5 m), 0.000001 incremental risk, this value may be less than the common limit of detection in some jurisdictions. Free-phase formation, a circumstance deemed unacceptable by many jurisdictions, occurs when a substance exceeds its solubility limit in soil water. Consult factsheet for additional information.
Naphthalene	**91-20-3**
Residential and Parkland	(consult factsheet)
Xylenes (o-, m-, p- isomers)	**1330-20-7**
Residential and Parkland	11 mg/kg coarse (surface (<=1.5 m); 2.4 mg/kg fine (surface (<=1.5 m); 11 mg/kg coarse (subsoil (>1.5 m); 2.4 mg/kg fine (subsoil (>1.5 m), Free-phase formation, a circumstance deemed unacceptable by many jurisdictions, occurs when a substance exceeds its solubility limit in soil water. The concentration at which this occurs is dependent on soil texture, porosity, and aeration porosity. Under the assumptions used for this guideline, at concentrations greater than 600 mg/kg in coarse soil, or 610 mg/kg in fine soil, formation of free-phase Xylene will likely occur)

Hexane	**110-54-3**
Residential and Parkland	0.49 mg/kg coarse (Site-specific conditions should be considered when applying these guideline values. Various jurisdictions may apply the values differently and local jurisdictions should be consulted prior to application of these values); 6.5 mg/kg fine (Site-specific conditions should be considered when applying these guideline values. Various jurisdictions may apply the values differently and local jurisdictions should be consulted prior to application of these values)
Ethylene glycol	**107-21-1**
Residential and Parkland	960 mg/kg (dry weight)
1,1,1-Trichloroethane (71-55-6), Methylene chloride (75-09-2)	
Residential and Parkland	5 mg/kg (dry weight)
Trichloroethene	**79-01-6**
Residential and Parkland	0.01 mg/kg (dry weight)
Tetrachloroethylene	**127-18-4**
Residential and Parkland	0.2 mg/kg (dry weight)

Council of Ministers of the Environment - Water Quality Guidelines

Toluene	**108-88-3**
Marine Aquatic Life	215 µg/L
Benzene, ethyl-	**100-41-4**
Marine Aquatic Life	25 µg/L
Benzene	**71-43-2**
Marine Aquatic Life	110 µg/L
Naphthalene	**91-20-3**
Marine Aquatic Life	1.4 µg/L

Additional information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR. B2, D1A, D2A, D2B, E

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Toluene (108-88-3), Cyclohexane (110-82-7), 1,1,1-Trichloroethane (71-55-6)	
SARA 313:	1 % de minimis concentration
CERCLA:	1000 lb final RQ ; 454 kg final RQ
Phenol	**108-95-2**

SARA 302:	500 lb lower TPQ ; 10000 lb upper TPQ
SARA 313:	1 % de minimis concentration
CERCLA:	1000 lb final RQ ; 454 kg final RQ
SARA 304:	1000 lb EPCRA RQ
Benzene, ethyl- (100-41-4), Styrene (100-42-5), Methylene chloride (75-09-2)	
SARA 313:	0.1 % de minimis concentration
CERCLA:	1000 lb final RQ ; 454 kg final RQ
Benzene	**71-43-2**
SARA 313:	0.1 % de minimis concentration
CERCLA:	10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule)
Naphthalene (91-20-3), Tetrachloroethylene (127-18-4)	
SARA 313:	0.1 % de minimis concentration
CERCLA:	100 lb final RQ ; 45.4 kg final RQ
Xylenes (o-, m-, p- isomers)	**1330-20-7**
SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ ; 45.4 kg final RQ
Nonane	**111-84-2**
TSCA 12b:	Section 4 , 1 % de minimus concentration
Hexane (110-54-3), Methyl alcohol (67-56-1), n-Butyl alcohol (71-36-3), Ethylene glycol (107-21-1), Hexone (108-10-1), Cyclohexanol (108-93-0)	
SARA 313:	1 % de minimis concentration
CERCLA:	5000 lb final RQ ; 2270 kg final RQ
Isopropyl alcohol	**67-63-0**
SARA 313:	1 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
Acetone (67-64-1), Methyl ethyl ketone (78-93-3), Cyclohexanone (108-94-1), n-Butyl acetate (123-86-4), Acetate, ethyl (141-78-6)	
CERCLA:	5000 lb final RQ ; 2270 kg final RQ
Trichloroethene	**79-01-6**
SARA 313:	0.1 % de minimis concentration
CERCLA:	100 lb final RQ ; 45.4 kg final RQ
TSCA 12b:	Section 5 , 0.1 % de minimus concentration
2-Ethoxyethanol	**110-80-5**

SARA 313:	1 % de minimis concentration
CERCLA:	1000 lb final RQ ; 454 kg final RQ
TSCA 12b:	Section 5 , 1 % de minimus concentration
2-Methoxyethyl acetate	**110-49-6**
TSCA 12b:	Section 5 , 1 % de minimus concentration
2-Methoxyethanol	**109-86-4**
SARA 313:	1 % de minimis concentration
TSCA 12b:	Section 5 , 1 % de minimus concentration
Vinyl acetate	**108-05-4**
SARA 302:	1000 lb TPQ
SARA 313:	0.1 % de minimis concentration
CERCLA:	5000 lb final RQ ; 2270 kg final RQ
SARA 304:	5000 lb EPCRA RQ

SARA Section 311/312 (40 CFR 370 Subparts B and C) 2016 reporting categories
Acute Health: Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactivity:** No

Component Analysis - Inventory

Toluene (108-88-3)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Phenol (108-95-2)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Pentane (109-66-0)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Benzene, ethyl- (100-41-4)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Styrene (100-42-5)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Benzene (71-43-2)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Naphthalene (91-20-3)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Decane (124-18-5)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Xylenes (o-, m-, p- isomers) (1330-20-7)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Cyclohexane (110-82-7)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Octane (111-65-9)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Nonane (111-84-2)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Hexane (110-54-3)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Dodecane (112-40-3)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Heptane (n-) (142-82-5)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

1,2-Propylene glycol (57-55-6)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Ethyl alcohol (64-17-5)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Methyl alcohol (67-56-1)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Isopropyl alcohol (67-63-0)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Acetone (67-64-1)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

n-Propyl alcohol (71-23-8)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

n-Butyl alcohol (71-36-3)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Water (7732-18-5)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Methyl ethyl ketone (78-93-3)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Ethylene glycol (107-21-1)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Methyl n-amyl ketone (110-43-0)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Cyclohexanol (108-93-0)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Cyclohexanone (108-94-1)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Hexone (108-10-1)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Solids (Not Available)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
No	No	No	No	No	No	No	No	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	No	No	No	No	No	No

1,1,1-Trichloroethane (71-55-6)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	No	Yes	Yes

Methylene chloride (75-09-2)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Trichloroethene (79-01-6)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Tetrachloroethylene (127-18-4)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

n-Butyl acetate (123-86-4)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

2-Ethoxyethanol (110-80-5)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Acetate, 2-butoxyethyl (112-07-2)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Acetate, ethyl (141-78-6)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Methyl acetate (79-20-9)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Isopropyl acetate (108-21-4)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

n-Propyl acetate (109-60-4)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

2-Methoxyethyl acetate (110-49-6)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	No	Yes	Yes

2-Methoxyethanol (109-86-4)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
Yes	Yes	Yes	Yes	Yes	Yes	Yes

Propylene glycol monomethyl ether (107-98-2)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Vinyl acetate (108-05-4)

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW	VN (Draft)
No	Yes	Yes	Yes	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

Summary of Changes

Regulatory review and update. Changes to Sections 8 and 11.

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CFR - Code of Federal Regulations (US); CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CPR - Controlled Products Regulations; DOT - Department of Transportation; DSL - Domestic Substances List; EPA - Environmental Protection Agency; F - Fahrenheit; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NDSL – Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; RCRA - Resource Conservation and Recovery Act; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; WHMIS - Workplace Hazardous Materials Information System (Canada). **Other Information**

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