



This is a kit that contains the following components:  
EUCOTHANE CLEAR PART A  
EUCOTHANE CLEAR PART A



# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** EUCOTHANE CLEAR PART A  
**Product Code:** CUSK G034 000

### Recommended use and restriction on use

**Recommended use:** Coatings  
**Restrictions on use:** Not known.

### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

**Contact person:** EH&S Department  
**Telephone:** 216-531-9222  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

### Hazard Classification

#### Physical Hazards

Flammable liquids Category 3

#### Health Hazards

Acute toxicity (Inhalation - vapor) Category 4  
Acute toxicity (Inhalation - dust and mist) Category 4  
Skin Corrosion/Irritation Category 2  
Serious Eye Damage/Eye Irritation Category 2A  
Carcinogenicity Category 2  
Toxic to reproduction Category 1B  
Specific Target Organ Toxicity - Repeated Exposure Category 2<sup>1</sup>

#### Target Organs

1. hearing

#### Unknown toxicity - Health

Acute toxicity, oral 4 %  
Acute toxicity, dermal 9.5 %  
Acute toxicity, inhalation, vapor 66 %  
Acute toxicity, inhalation, dust or mist 66 %

### Environmental Hazards



Acute hazards to the aquatic environment	Category 3
Chronic hazards to the aquatic environment	Category 3

**Unknown toxicity - Environment**

Acute hazards to the aquatic environment	59.5 %
Chronic hazards to the aquatic environment	59.5 %

**Label Elements****Hazard Symbol:****Signal Word:** Danger**Hazard Statement:** Flammable liquid and vapor.  
Harmful if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.  
Suspected of causing cancer.  
May damage fertility. May damage the unborn child.  
May cause damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life with long lasting effects.**Precautionary Statements****Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.**Response:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue



rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:** Store in a well-ventilated place. Keep cool. Store locked up.

**Disposal:** Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

**Hazard(s) not otherwise classified (HNOC):** Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Methyl n-amyl ketone	110-43-0	10 - <25%
Xylene	1330-20-7	10 - <20%
P-chlorobenzotrifluoride	98-56-6	5 - <10%
Ethylbenzene	100-41-4	1 - <2.5%
Dibutyl tin dilaurate	77-58-7	0.3 - <1%
Diisobutyl ketone	108-83-8	0.1 - <1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

#### Description of necessary first-aid measures

**Inhalation:** Move to fresh air.

**Skin Contact:** Take off immediately all contaminated clothing. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Ingestion:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

**Personal Protection for First-aid Responders:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

#### Most important symptoms/effects, acute and delayed

**Symptoms:** Respiratory tract irritation. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

**Hazards:** No data available.

#### Indication of immediate medical attention and special treatment needed



**Treatment:** Symptoms may be delayed.

## 5. Fire-fighting measures

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Avoid water in straight hose stream; will scatter and spread fire.

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

### Special protective equipment and precautions for fire-fighters

**Special fire-fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Accidental release measures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Methods and material for containment and cleaning up:** Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

## 7. Handling and storage

### Handling



<b>Technical measures (e.g. Local and general ventilation):</b>	Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.
<b>Safe handling advice:</b>	Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Avoid contact with skin.
<b>Contact avoidance measures:</b>	No data available.
<b>Hygiene measures:</b>	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. When using do not smoke. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Avoid contact with skin.
<b>Storage</b>	
<b>Safe storage conditions:</b>	Store locked up. Store in a well-ventilated place. Store in a cool place.
<b>Safe packaging materials:</b>	No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Methyl n-amyl ketone	TWA	50 ppm	US. ACGIH Threshold Limit Values, as amended (2011)
	PEL	100 ppm 465 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Ethylbenzene	TWA	20 ppm	US. ACGIH Threshold Limit Values, as amended (2011)
	PEL	100 ppm 435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Chemical Identity	Type	Exposure Limit Values	Source
Methyl n-amyl ketone	TWA	50 ppm	US. ACGIH Threshold Limit Values, as amended (2011)
	PEL	100 ppm 465 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Xylene	PEL	100 ppm 435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	STEL	150 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
	TWA	100 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
Ethylbenzene	TWA	20 ppm	US. ACGIH Threshold Limit Values, as



			amended (2011)
	PEL	100 ppm 435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Diisobutyl ketone	PEL	50 ppm 290 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	25 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
Dibutyl tin dilaurate - as Sn	STEL	0.2 mg/m3	US. ACGIH Threshold Limit Values, as amended (2011)
	TWA	0.1 mg/m3	US. ACGIH Threshold Limit Values, as amended (2011)
	PEL	0.1 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)

Chemical name	Type	Exposure Limit Values	Source
Methyl n-amyl ketone	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Methyl n-amyl ketone	TWA	25 ppm 115 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Methyl n-amyl ketone	TWA	50 ppm 233 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
1-Methoxy-2-propanol acetate	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	75 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
1-Methoxy-2-propanol acetate	TWA	50 ppm 270 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007)
Ethyl 3-ethoxypropionate	TWA	50 ppm 300 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007)
Ethylbenzene	TWA	20 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Ethylbenzene	TWA	20 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Ethylbenzene	TWA	20 ppm	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)



Chemical name	Type	Exposure Limit Values	Source
Methyl n-amyl ketone	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Methyl n-amyl ketone	TWA	25 ppm 115 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Methyl n-amyl ketone	TWA	50 ppm 233 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Xylene	STEL	150 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	100 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Xylene	STEL	150 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Xylene	TWA	100 ppm 434 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	STEL	150 ppm 651 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Ethylbenzene	TWA	20 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Ethylbenzene	TWA	20 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Ethylbenzene	TWA	20 ppm	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)
Diisobutyl ketone	TWA	25 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Diisobutyl ketone	TWA	25 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Diisobutyl ketone	TWA	25 ppm 145 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Dibutyl tin dilaurate - as Sn	STEL	0.2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.1 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)





Dibutyl tin dilaurate - as Sn	TWA	0.1 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Dibutyl tin dilaurate - as Sn	STEL	0.2 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	TWA	0.1 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)

**Biological Limit Values**

Chemical Identity	Exposure Limit Values	Source
Xylene (Methylhippuric acids: Sampling time: End of shift.)	1.5 g/g (Creatinine in urine)	ACGIH BEI (03 2013)
Ethylbenzene (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.)	0.15 g/g (Creatinine in urine)	ACGIH BEI (02 2014)

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment****Eye/face protection:**

Wear safety glasses with side shields (or goggles).

**Skin Protection****Hand Protection:**

Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:**

Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Respiratory Protection:**

In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:**

Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. When using do not smoke. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Avoid contact with skin.

**9. Physical and chemical properties****Appearance****Physical state:**

liquid

**Form:**

liquid

**Color:**

No data available.

**Odor:**

Mild petroleum/solvent

**Odor threshold:**

No data available.



<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	137 - 191 °C 279 - 375 °F
<b>Flash Point:</b>	38 °C 100 °F
<b>Evaporation rate:</b>	Slower than Ether
<b>Flammability (solid, gas):</b>	No
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
<b>Relative density:</b>	1.0
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Practically Insoluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Heat, sparks, flames.
<b>Incompatible Materials:</b>	Alcohols. Amines. Strong acids. Strong bases. Water, moisture.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	May be harmful in contact with skin. Causes skin irritation.
<b>Eye contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	May be harmful if swallowed.

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

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

<b>Oral</b>	
<b>Product:</b>	ATEmix: 3,382.19 mg/kg
<b>Dermal</b>	
<b>Product:</b>	ATEmix: 4,782.61 mg/kg
<b>Inhalation</b>	
<b>Product:</b>	ATEmix: 13.76 mg/l ATEmix : 1.5 mg/l

**Repeated dose toxicity**

<b>Product:</b>	No data available.
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**Skin Corrosion/Irritation**

<b>Product:</b>	No data available.
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**Specified substance(s):**

Methyl n-amyl ketone	in vivo (Rabbit): Moderately irritating , 4 h
Xylene	in vivo (Rat): Slightly irritating , 24 h
P-chlorobenzotrifluoride	in vivo (Rabbit): Not irritant (unspecified classification) , 24 - 72 h
Dibutyl tin dilaurate	In vitro (Human, in vitro reconstituted epidermis model): Not irritant , 15 min
Diisobutyl ketone	in vivo (Rabbit): Not irritant , 24 - 72 h

**Serious Eye Damage/Eye Irritation**

<b>Product:</b>	No data available.
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**Specified substance(s):**

Xylene	Rabbit, 24 hrs: Moderately irritating Rabbit, 1 hrs: Not irritant
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P-chlorobenzotrifluoride Rabbit, 24 hrs: Not irritant  
Dibutyl tin dilaurate Rabbit, 24 hrs: Highly irritating  
Diisobutyl ketone Rabbit, 24 - 72 hrs: Not irritant

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Carcinogenicity**

**Product:** Suspected of causing cancer.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

P-chlorobenzotrifluoride Overall evaluation: Possibly carcinogenic to humans.  
Ethylbenzene Overall evaluation: Possibly carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**  
**Product:** No data available.

**In vivo**  
**Product:** No data available.

**Reproductive toxicity**

**Product:** May damage fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Target Organs**

Specific Target Organ Toxicity - Repeated Exposure: hearing

**Aspiration Hazard**

**Product:** No data available.



**Other effects:** No data available.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Specified substance(s):

Methyl n-amyl ketone	LC 50 (Pimephales promelas, 96 h): 131 mg/l Experimental result, Key study
Xylene	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 13.41 mg/l Mortality
P-chlorobenzotrifluoride	LC 50 (96 h): 3 mg/l Experimental result, Key study
Ethylbenzene	LC 50 (Oncorhynchus mykiss, 96 h): 4.2 mg/l Experimental result, Key study
Diisobutyl ketone	LC 50 (Oncorhynchus mykiss, 96 h): 30 mg/l Experimental result, Key study

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):

Methyl n-amyl ketone	EC 50 (Daphnia magna, 48 h): > 90.1 mg/l experimental result Experimental result, Key study
P-chlorobenzotrifluoride	EC 50 (Daphnia magna, 48 h): 18.84 mg/l experimental result Experimental result, Key study
Ethylbenzene	EC 50 (Daphnia magna, 48 h): 1.8 - 2.4 mg/l experimental result Experimental result, Key study
Dibutyl tin dilaurate	EC 50 (Water flea (Daphnia magna), 24 h): 0.66 mg/l Intoxication EC 50 (Daphnia magna, 48 h): 1.7 - 3.4 mg/l experimental result Experimental result, Key study
Diisobutyl ketone	EC 50 (Daphnia magna, 48 h): 37.2 mg/l experimental result Experimental result, Key study

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s):



Ethylbenzene NOAEL (Ceriodaphnia dubia): 1 mg/l secondary data Other, Key study

**Toxicity to Aquatic Plants  
Product:**

No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:**

No data available.

**Specified substance(s):**

Methyl n-amyl ketone 69 % (28 d) Detected in water. Experimental result, Key study

P-chlorobenzotrifluoride 7 % (28 d) Detected in water. Experimental result, Key study

Ethylbenzene 70 - 80 % (28 d) Detected in water. Experimental result, Key study

Dibutyl tin dilaurate 23 % (39 d) Detected in water. Experimental result, Key study

Diisobutyl ketone 88 % Detected in water. Experimental result, Key study

**BOD/COD Ratio**

**Product:**

No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:**

No data available.

**Specified substance(s):**

Xylene

Oncorhynchus mykiss, Bioconcentration Factor (BCF): > 8.1 - < 25.9 Aquatic sediment Experimental result, Key study

P-chlorobenzotrifluoride Bioconcentration Factor (BCF): 9 Aquatic sediment Estimated by calculation, Key study

Ethylbenzene Oncorhynchus kisutch, Bioconcentration Factor (BCF): 1 Aquatic sediment Other, Key study

**Partition Coefficient n-octanol / water (log Kow)**

**Product:**

No data available.

**Specified substance(s):**

Methyl n-amyl ketone Log Kow: 1.98

Xylene Log Kow: 2.77 - 3.15 No Not specified, Not specified

P-chlorobenzotrifluoride Log Kow: 3.60 25 °C

Ethylbenzene Log Kow: 3.15  
Log Kow: 3.13 - 3.14 No Other, Supporting study

Dibutyl tin dilaurate Log Kow: 3.12



Diisobutyl ketone

Log Kow: 2.56

**Mobility in soil:** No data available.**Other adverse effects:** Harmful to aquatic life with long lasting effects.**13. Disposal considerations****Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.**Contaminated Packaging:** No data available.**14. Transport information****TDG:**

UN1993, FLAMMABLE LIQUID, N.O.S. (Xylene, Butyl Acetate), 3, PG III

**CFR / DOT:**

UN1993, Flammable liquids, n.o.s. (Xylene, Butyl Acetate), 3, PG III

**IMDG:**

UN1993, FLAMMABLE LIQUID, N.O.S. (Xylene, Butyl Acetate), 3, PG III

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**15. Regulatory information****US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)****Chemical Identity**

P-chlorobenzotrifluoride

**Reportable quantity**

De minimis concentration: TSCA 4% One-Time Export Notification only.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

None present or none present in regulated quantities.



**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Xylene	100 lbs.
Ethylbenzene	1000 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

- Fire Hazard
- Immediate (Acute) Health Hazards
- Delayed (Chronic) Health Hazard
- Flammable (gases, aerosols, liquids, or solids)
- Acute toxicity (any route or exposure)
- Skin Corrosion or Irritation
- Serious eye damage or eye irritation
- Carcinogenicity
- Reproductive toxicity
- Specific target organ toxicity (single or repeated exposure)
- Hazards Not Otherwise Classified (HNOC)

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

Not regulated.

**US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting**

<u>Chemical Identity</u>	<u>% by weight</u>
Xylene	1.0%
Ethylbenzene	0.1%

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Xylene	Reportable quantity: 100 lbs.

**US State Regulations**

**US. California Proposition 65**



**WARNING**

Cancer - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable





**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**VOC:** When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:  
253 g/l

Regulatory VOC (less water and exempt solvent) : 311 g/l

VOC Method 310 : 25.90 %

**Inventory Status:**

Canada DSL Inventory List:	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Ontario Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this product are not listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
Taiwan Chemical Substance Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	One or more components in this



product are not listed on or exempt from the Inventory.

EINECS, ELINCS or NLP:

One or more components in this product are not listed on or exempt from the Inventory.

Australia Industrial Chem. Act (AIC):

One or more components in this product are not listed on or exempt from the Inventory.

Switzerland New Subs  
Notified/Registered:

One or more components in this product are not listed on or exempt from the Inventory.

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

**Revision Date:** 11/17/2022

**Version #:** 3.1

**Further Information:** No data available.

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** EUCOTHANE CLEAR PART A  
**Product Code:** CUSK G034 000

### Recommended use and restriction on use

**Recommended use:** Coatings  
**Restrictions on use:** Not known.

### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY  
19218 REDWOOD ROAD  
CLEVELAND OH 44110  
US

**Contact person:** EH&S Department  
**Telephone:** 216-531-9222  
**Emergency telephone number:** 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

### Hazard Classification

#### Physical Hazards

Flammable liquids Category 3

#### Health Hazards

Acute toxicity (Inhalation - dust and mist) Category 4

Acute toxicity (Inhalation - vapor) Category 4

Acute toxicity (Inhalation - dust and mist) Category 4

Skin Corrosion/Irritation Category 2

Serious Eye Damage/Eye Irritation Category 2A

Respiratory sensitizer Category 1

Skin sensitizer Category 1

Carcinogenicity Category 2

Specific Target Organ Toxicity - Single Exposure Category 3<sup>2</sup>

Specific Target Organ Toxicity - Repeated Exposure Category 2<sup>3</sup>

2. Respiratory tract irritation.
3. hearing

#### Unknown toxicity - Health

Acute toxicity, inhalation, vapor 88 %



Acute toxicity, inhalation, dust or mist 11 %

### Environmental Hazards

Acute hazards to the aquatic environment Category 3

Chronic hazards to the aquatic environment Category 3

### Unknown toxicity - Environment

Acute hazards to the aquatic environment 78 %

Chronic hazards to the aquatic environment 78 %

### Label Elements

#### Hazard Symbol:



**Signal Word:** Danger

**Hazard Statement:** Flammable liquid and vapor.  
Harmful if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
Suspected of causing cancer.  
May cause respiratory irritation.  
May cause damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life with long lasting effects.

#### Precautionary Statements

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. [In case of inadequate ventilation] wear



respiratory protection.

**Response:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal:** Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

**Hazard(s) not otherwise classified (HNOC):** Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Homopolymer of HDI	28182-81-2	50 - <100%
Xylene	1330-20-7	10 - <20%
Butyl acetate	123-86-4	10 - <20%
Hexamethylene diisocyanate (HDI)	822-06-0	1 - <5%
Ethylbenzene	100-41-4	1 - <2.5%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

#### Description of necessary first-aid measures

**Inhalation:** Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.

**Skin Contact:** Take off immediately all contaminated clothing. Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Ingestion:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.



**Personal Protection for First-aid Responders:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** Respiratory tract irritation. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

**Hazards:** No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Symptoms may be delayed.

**5. Fire-fighting measures**

**General Fire Hazards:** Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Avoid water in straight hose stream; will scatter and spread fire.

**Specific hazards arising from the chemical:** Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

**Special protective equipment and precautions for fire-fighters**

**Special fire-fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep unauthorized personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.



<b>Accidental release measures:</b>	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
<b>Methods and material for containment and cleaning up:</b>	Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
<b>Environmental Precautions:</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

## 7. Handling and storage

### Handling

<b>Technical measures (e.g. Local and general ventilation):</b>	Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.
<b>Safe handling advice:</b>	Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes, skin, and clothing.
<b>Contact avoidance measures:</b>	No data available.
<b>Hygiene measures:</b>	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. When using do not smoke. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.

### Storage

<b>Safe storage conditions:</b>	Store locked up. Store in a well-ventilated place. Store in a cool place.
<b>Safe packaging materials:</b>	No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Xylene	PEL	100 ppm 435 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	STEL	150 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
	TWA	100 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
Butyl acetate	TWA	50 ppm	US. ACGIH Threshold Limit Values, as





			amended (03 2016)
	STEL	150 ppm	US. ACGIH Threshold Limit Values, as amended (03 2016)
	PEL	150 ppm 710 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
<b>Chemical Identity</b>	<b>Type</b>	<b>Exposure Limit Values</b>	<b>Source</b>
Xylene	PEL	100 ppm 435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	STEL	150 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
	TWA	100 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
Butyl acetate	TWA	50 ppm	US. ACGIH Threshold Limit Values, as amended (03 2016)
	STEL	150 ppm	US. ACGIH Threshold Limit Values, as amended (03 2016)
	PEL	150 ppm 710 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
Ethylbenzene	TWA	20 ppm	US. ACGIH Threshold Limit Values, as amended (2011)
	PEL	100 ppm 435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)

Chemical name	Type	Exposure Limit Values	Source
Xylene	STEL	150 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	100 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Xylene	STEL	150 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Xylene	TWA	100 ppm 434 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	STEL	150 ppm 651 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Butyl acetate	TWA	50 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
	STEL	150 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Butyl acetate	STEL	150 ppm	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)
Butyl acetate	STEL	150 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (01 2021)
	TWA	50 ppm	Canada. British Columbia OELs. (Occupational



			Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (01 2021)
	TWA	50 ppm	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm 0.034 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	CEILING	0.01 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEV	0.02 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)

Chemical name	Type	Exposure Limit Values	Source
Xylene	STEL	150 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	100 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Xylene	STEL	150 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	100 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Xylene	TWA	100 ppm 434 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	STEL	150 ppm 651 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Butyl acetate	TWA	50 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
	STEL	150 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Butyl acetate	STEL	150 ppm	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)
Butyl acetate	STEL	150 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (01 2021)
	TWA	50 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (01 2021)
	TWA	50 ppm	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)



Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Hexamethylene diisocyanate (HDI)	TWA	0.005 ppm 0.034 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	CEILING	0.01 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEV	0.02 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Ethylbenzene	TWA	20 ppm	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Ethylbenzene	TWA	20 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Ethylbenzene	TWA	20 ppm	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)

**Biological Limit Values**

Chemical Identity	Exposure Limit Values	Source
Xylene (Methylhippuric acids: Sampling time: End of shift.)	1.5 g/g (Creatinine in urine)	ACGIH BEI (03 2013)
Hexamethylene diisocyanate (HDI) (Hexamethylenediamine (with hydrolysis): Sampling time: End of shift.)	15 µg/g (Creatinine in urine)	ACGIH BEI (03 2015)
Ethylbenzene (Sum of mandelic acid and phenylglyoxylic acid: Sampling time: End of shift.)	0.15 g/g (Creatinine in urine)	ACGIH BEI (02 2014)

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment****Eye/face protection:**

Wear safety glasses with side shields (or goggles).

**Skin Protection****Hand Protection:**

Additional Information: Use suitable protective gloves if risk of skin contact.

**Skin and Body Protection:**

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.



**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Avoid contact with eyes. When using do not smoke. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	No data available.
<b>Odor:</b>	Mild petroleum/solvent
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	137 °C 279 °F
<b>Flash Point:</b>	32.5 °C 90.5 °F
<b>Evaporation rate:</b>	Slower than Ether
<b>Flammability (solid, gas):</b>	No
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
<b>Relative density:</b>	1.100
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Practically Insoluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

**10. Stability and reactivity**

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	Heat, sparks, flames.
<b>Incompatible Materials:</b>	Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Strong bases.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

**11. Toxicological information****Information on likely routes of exposure**

<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.

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

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

<b>Oral Product:</b>	ATEmix: 21,059.12 mg/kg
<b>Dermal Product:</b>	ATEmix: 10,000 mg/kg
<b>Inhalation Product:</b>	ATEmix: 11 mg/l ATEmix : 1.5 mg/l

**Repeated dose toxicity****Product:** No data available.**Skin Corrosion/Irritation****Product:** No data available.**Specified substance(s):**

Homopolymer of HDI	in vivo (Rabbit): Irritating , 24 - 72 h
Xylene	in vivo (Rat): Slightly irritating , 24 h
Butyl acetate	in vivo (Rabbit): Not irritant , 24 - 72 h
Hexamethylene diisocyanate (HDI)	in vivo (Rabbit): Corrosive , 4 - 72 h

**Serious Eye Damage/Eye Irritation****Product:** No data available.**Specified substance(s):**

Homopolymer of HDI	Rabbit, 24 - 72 hrs: Not irritant
Xylene	Rabbit, 24 hrs: Moderately irritating Rabbit, 1 hrs: Not irritant
Butyl acetate	Rabbit, 24 - 72 hrs: Not irritant

**Respiratory or Skin Sensitization****Product:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause sensitization by inhalation.**Carcinogenicity****Product:** Suspected of causing cancer.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Ethylbenzene Overall evaluation: Possibly carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**  
**Product:** No data available.

**In vivo**  
**Product:** No data available.

**Reproductive toxicity**  
**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**  
**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**  
**Product:** No data available.

Specific Target Organ Toxicity - Single Exposure: Respiratory tract irritation.  
Specific Target Organ Toxicity - Repeated Exposure: hearing

**Aspiration Hazard**  
**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish**

**Product:** No data available.

**Specified substance(s):**

Xylene LC 50 (Fathead minnow (Pimephales promelas), 96 h): 13.41 mg/l Mortality  
Butyl acetate EC 50 (Pimephales promelas, 96 h): 18 mg/l Experimental result, Key study  
Ethylbenzene LC 50 (Oncorhynchus mykiss, 96 h): 4.2 mg/l Experimental result, Key study

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Homopolymer of HDI EC 50 (Daphnia sp., 24 h): >= 100 mg/l experimental result Experimental result, Supporting study



Butyl acetate	EC 50 (Daphnia sp., 48 h): 44 mg/l experimental result Experimental result, Key study
Ethylbenzene	EC 50 (Daphnia magna, 48 h): 1.8 - 2.4 mg/l experimental result Experimental result, Key study

**Chronic hazards to the aquatic environment:****Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Butyl acetate NOAEL (Daphnia magna): 23 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Key study

Ethylbenzene NOAEL (Ceriodaphnia dubia): 1 mg/l secondary data Other, Key study

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability****Biodegradation**

**Product:** No data available.

**Specified substance(s):**

Homopolymer of HDI 1 % (28 d) Detected in water. Experimental result, Key study

Butyl acetate 83 % Detected in water. Experimental result, Key study

Hexamethylene diisocyanate (HDI) 42 % (28 d) Detected in water. Experimental result, Key study

Ethylbenzene 70 - 80 % (28 d) Detected in water. Experimental result, Key study

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential****Bioconcentration Factor (BCF)**

**Product:** No data available.

**Specified substance(s):**

Xylene Oncorhynchus mykiss, Bioconcentration Factor (BCF): > 8.1 - < 25.9 Aquatic sediment Experimental result, Key study





Butyl acetate	Bioconcentration Factor (BCF): 15.3 Aquatic sediment Estimated by calculation, Supporting study
Hexamethylene diisocyanate (HDI)	Bioconcentration Factor (BCF): 57.63 Aquatic sediment Estimated by calculation, Key study
Ethylbenzene	Oncorhynchus kisutch, Bioconcentration Factor (BCF): 1 Aquatic sediment Other, Key study

**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Specified substance(s):**

Xylene	Log Kow: 2.77 - 3.15 No Not specified, Not specified
Butyl acetate	Log Kow: 1.78
Hexamethylene diisocyanate (HDI)	Log Kow: 3.20
Ethylbenzene	Log Kow: 3.15 Log Kow: 3.13 - 3.14 No Other, Supporting study

**Mobility in soil:** No data available.**Other adverse effects:** Harmful to aquatic life with long lasting effects.**13. Disposal considerations****Disposal methods:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.**Contaminated Packaging:** No data available.**14. Transport information****TDG:**

UN1993, FLAMMABLE LIQUID, N.O.S. (Xylene, Butyl Acetate), 3, PG III

**CFR / DOT:**

UN1993, Flammable liquids, n.o.s. (Xylene, Butyl Acetate), 3, PG III

**IMDG:**

UN1993, FLAMMABLE LIQUID, N.O.S. (Xylene, Butyl Acetate), 3, PG III

**Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

**15. Regulatory information****US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Xylene	100 lbs.
Butyl acetate	5000 lbs.
Hexamethylene diisocyanate (HDI)	100 lbs.
Ethylbenzene	1000 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Fire Hazard  
 Immediate (Acute) Health Hazards  
 Delayed (Chronic) Health Hazard  
 Flammable (gases, aerosols, liquids, or solids)  
 Acute toxicity (any route or exposure)  
 Skin Corrosion or Irritation  
 Serious eye damage or eye irritation  
 Respiratory or Skin Sensitization  
 Carcinogenicity  
 Specific target organ toxicity (single or repeated exposure)  
 Hazards Not Otherwise Classified (HNOC)

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

Not regulated.

**US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting**

<u>Chemical Identity</u>	<u>% by weight</u>
Xylene	1.0%
Hexamethylene diisocyanate (HDI)	1.0%
Ethylbenzene	0.1%

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
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Xylene

Reportable quantity: 100 lbs.

**US State Regulations**

**US. California Proposition 65**



**WARNING**

Cancer - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**VOC:** When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:  
253 g/l

Regulatory VOC (less water and exempt solvent) : 135 g/l

VOC Method 310 : 12.30 %

**Inventory Status:**

Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	All components in this product are listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	All components in this product are listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Ontario Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this



product are not listed on or exempt from the Inventory.

Taiwan Chemical Substance Inventory: One or more components in this product are not listed on or exempt from the Inventory.

Australia Industrial Chem. Act (AIC): One or more components in this product are not listed on or exempt from the Inventory.

Switzerland New Subs Notified/Registered: One or more components in this product are not listed on or exempt from the Inventory.

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

**Revision Date:** 11/17/2022

**Version #:** 3.1

**Further Information:** No data available.

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.