# **SAFETY DATA SHEET**



# **Section 1. Identification**

GHS product identifier :

Document product code :

Other means of identification

: Not available.

Product type

: Aerosol.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses :

Supplier/Manufacturer :

Emergency telephone number (with hours of operation)

4

## Section 2. Hazards identification

**OSHA/HCS** status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE AEROSOLS - Category 1

GASES UNDER PRESSURE - Compressed gas SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (bladder, hearing

organs, kidneys, liver, respiratory system) - Category 2

ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (ACUTE) - Category 3

GHS label elements

Hazard pictograms









## Section 2. Hazards identification

Signal word

: Danger

**Hazard statements** 

H222 - Extremely flammable aerosol.

H280 - Contains gas under pressure; may explode if heated.

H319 - Causes serious eye irritation.

H315 - Causes skin irritation.

H361 - Suspected of damaging the unborn child. H304 - May be fatal if swallowed and enters airways.

H336 - May cause drowsiness or dizziness.

H373 - May cause damage to organs through prolonged or repeated exposure. (bladder,

hearing organs, kidneys, liver, respiratory system)

H402 - Harmful to aquatic life.

#### **Precautionary statements**

**Prevention** 

: P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P211 - Do not spray on an open flame or other ignition source.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P260 - Do not breathe dust or mist.

P264 - Wash hands thoroughly after handling.

P251 - Pressurized container: Do not pierce or burn, even after use.

Response

: P314 - Get medical attention if you feel unwell.

P308 + P313 - IF exposed or concerned: Get medical attention.

P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Call a POISON CENTER or physician if you feel unwell.

P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or

physician. Do NOT induce vomiting.

P302 + P352 + P362+P364 - IF ON SKIN: Wash with plenty of soap and water. Take off

contaminated clothing and wash it before reuse.

P332 + P313 - If skin irritation occurs: Get medical attention.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

**Storage** 

: P405 - Store locked up.

P410 - Protect from sunlight.

P412 - Do not expose to temperatures exceeding 50°C/122°F.

P403 - Store in a well-ventilated place.

Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national

and international regulations.

**Hazards not otherwise** 

classified

: None known.

# Section 3. Composition/information on ingredients

Substance/mixture

Mixture

Other means of identification

: Not available.

Ingredient name	%	CAS number
Toluene 2-Butoxyethanol	≥25 - ≤50 ≥10 - <25 ≥3 - ≤5 ≥3 - ≤5	67-64-1 108-88-3 111-76-2 107-98-2

# Section 3. Composition/information on ingredients

United States: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Canada: The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

#### **Description of necessary first aid measures**

**Eye contact** 

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** 

: Flush contaminated skin with plenty of water. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

#### Potential acute health effects

Eye contact

: Causes serious eye irritation.

Inhalation

: Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

redness

Skin contact

: Causes skin irritation.

Ingestion

: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

Eye contact

: Adverse symptoms may include the following: pain or irritation watering



## Section 4. First aid measures

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

**Ingestion**: Adverse symptoms may include the following:

nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to

give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing

media

**Unsuitable extinguishing** 

media

: Use an extinguishing agent suitable for the surrounding fire.

: None known.

# Specific hazards arising from the chemical

: Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

Decomposition products may include the following materials:

carbon dioxide carbon monoxide



# Section 5. Fire-fighting measures

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

#### Methods and materials for containment and cleaning up

**Spill** 

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

#### Precautions for safe handling

**Protective measures** 

: Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.



## Section 7. Handling and storage

# Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

# Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **United States**

Occupational exposure limits

Ingredient name	Exposure limits
Acetone	ACGIH TLV (United States, 3/2017).  TWA: 250 ppm 8 hours.  STEL: 500 ppm 15 minutes.  NIOSH REL (United States, 10/2016).  TWA: 250 ppm 10 hours.  TWA: 590 mg/m³ 10 hours.  OSHA PEL (United States, 6/2016).  TWA: 1000 ppm 8 hours.  TWA: 2400 mg/m³ 8 hours.
Toluene	OSHA PEL Z2 (United States, 2/2013).  TWA: 200 ppm 8 hours.  CEIL: 300 ppm  AMP: 500 ppm 10 minutes.  NIOSH REL (United States, 10/2016).  TWA: 100 ppm 10 hours.  TWA: 375 mg/m³ 10 hours.  STEL: 150 ppm 15 minutes.  STEL: 560 mg/m³ 15 minutes.  ACGIH TLV (United States, 3/2017).  TWA: 20 ppm 8 hours.
2-Butoxyethanol	ACGIH TLV (United States, 3/2017).  TWA: 20 ppm 8 hours.  NIOSH REL (United States, 10/2016). Absorbed through skin.  TWA: 5 ppm 10 hours.  TWA: 24 mg/m³ 10 hours.  OSHA PEL (United States, 6/2016). Absorbed through skin.  TWA: 50 ppm 8 hours.  TWA: 240 mg/m³ 8 hours.
1-Methoxy-2-propanol	ACGIH TLV (United States, 3/2017).  TWA: 50 ppm 8 hours.  TWA: 184 mg/m³ 8 hours.  STEL: 100 ppm 15 minutes.  STEL: 369 mg/m³ 15 minutes.  NIOSH REL (United States, 10/2016).  TWA: 100 ppm 10 hours.  TWA: 360 mg/m³ 10 hours.  STEL: 150 ppm 15 minutes.  STEL: 540 mg/m³ 15 minutes.

# Section 8. Exposure controls/personal protection

## **Canada**

### **Occupational exposure limits**

Ingredient name	Exposure limits
Acetone	CA Alberta Provincial (Canada, 4/2009).  8 hrs OEL: 1200 mg/m³ 8 hours.  15 min OEL: 500 ppm 8 hours.  15 min OEL: 750 ppm 15 minutes.  CA British Columbia Provincial (Canada, 6/2017).  TWA: 250 ppm 8 hours.  STEL: 500 ppm 15 minutes.  CA Ontario Provincial (Canada, 1/2018).  TWA: 250 ppm 8 hours.  STEL: 500 ppm 15 minutes.  CA Quebec Provincial (Canada, 1/2014).  TWAEV: 500 ppm 8 hours.  TWAEV: 1190 mg/m³ 8 hours.  STEV: 1000 ppm 15 minutes.  STEV: 2380 mg/m³ 15 minutes.  CA Saskatchewan Provincial (Canada, 7/2013).  STEL: 750 ppm 15 minutes.  TWA: 500 ppm 8 hours.
Toluene	CA Alberta Provincial (Canada, 4/2009). Absorbed through skin.  8 hrs OEL: 50 ppm 8 hours.  8 hrs OEL: 188 mg/m³ 8 hours.  CA British Columbia Provincial (Canada, 6/2017).  TWA: 20 ppm 8 hours.  CA Ontario Provincial (Canada, 1/2018).  TWA: 20 ppm 8 hours.  CA Quebec Provincial (Canada, 1/2014). Absorbed through skin.  TWAEV: 50 ppm 8 hours.  TWAEV: 188 mg/m³ 8 hours.  CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.  STEL: 60 ppm 15 minutes.  TWA: 50 ppm 8 hours.
2-Butoxyethanol	TWA: 50 ppm 8 hours.  CA Alberta Provincial (Canada, 4/2009).  8 hrs OEL: 97 mg/m³ 8 hours.  8 hrs OEL: 20 ppm 8 hours.  CA British Columbia Provincial (Canada, 6/2017).  TWA: 20 ppm 8 hours.  CA Ontario Provincial (Canada, 1/2018).  TWA: 20 ppm 8 hours.  CA Quebec Provincial (Canada, 1/2014).  TWAEV: 20 ppm 8 hours.  TWAEV: 97 mg/m³ 8 hours.  CA Saskatchewan Provincial (Canada, 7/2013).  STEL: 30 ppm 15 minutes.  TWA: 20 ppm 8 hours.
1-Methoxy-2-propanol	CA Alberta Provincial (Canada, 4/2009).  8 hrs OEL: 100 ppm 8 hours.  15 min OEL: 553 mg/m³ 15 minutes.  8 hrs OEL: 369 mg/m³ 8 hours.  15 min OEL: 150 ppm 15 minutes.  CA British Columbia Provincial (Canada, 6/2017).  STEL: 75 ppm 15 minutes.  TWA: 50 ppm 8 hours.  CA Ontario Provincial (Canada, 1/2018).  TWA: 50 ppm 8 hours.  STEL: 100 ppm 15 minutes.  CA Quebec Provincial (Canada, 1/2014).  TWAEV: 369 mg/m³ 8 hours.  STEV: 150 ppm 15 minutes.  STEV: 553 mg/m³ 15 minutes.  CA Saskatchewan Provincial (Canada, 7/2013).  STEL: 150 ppm 15 minutes.  TWA: 100 ppm 8 hours.



# Section 8. Exposure controls/personal protection

# Appropriate engineering controls

# : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

# **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

#### Individual protection measures

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** 

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

#### **Skin protection**

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** 

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties

#### **Appearance**

Physical state : Liquid. [Aerosol.]

Color : Black.

Odor : Solvent. [Strong]
Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : Not available.

Flash point : Closed cup: -104°C (-155.2°F)

Evaporation rate : 2.24 (Toluene = 1)
Flammability (solid, gas) : Not available.



# Section 9. Physical and chemical properties

Lower and upper explosive

: Lower: 2.5% (flammable) limits Upper: 12.8% Vapor pressure : Not available. Vapor density : 3.1 [Air = 1] **Relative density** : 0.952 Solubility : Insoluble.

Partition coefficient: n-

octanol/water

**Auto-ignition temperature** : 465°C (869°F) **Decomposition temperature** : Not available.

**Viscosity** : Dynamic (room temperature): <500 mPa·s (<500 cP)

: Not available.

: Not available. Flow time (ISO 2431)

**VOC = Volatile Organic** 

Compound

**Aerosol product** 

Type of aerosol : Spray **Heat of combustion** : 35.04 kJ/g

# Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

: The product is stable. Chemical stability

**Possibility of hazardous** 

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).

**Incompatible materials** : Strong oxidizing and reducing agents, acids, bases, halogenated compounds.

**Hazardous decomposition** 

products

: During a fire, irritating and toxic gases such as carbon monoxide, carbon dioxide and other toxic and irritating compounds such as formaldehyde, methanol, acetic acid, hydrogen peroxide, methane and ethylene oxide may form, depending on the fire conditions.

## **Section 11. Toxicological information**

#### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Acetone Toluene 2-Butoxyethanol 1-Methoxy-2-propanol	LD50 Oral LC50 Inhalation Vapor LD50 Oral LD50 Dermal LD50 Oral	Rat Rat Rabbit	5800 mg/kg 49 g/m³ 917 mg/kg 13 g/kg 6600 mg/kg	- 4 hours 



# **Section 11. Toxicological information**

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Acetone	Eyes - Mild irritant	Rabbit	-	10 μΙ	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	395 mg	-
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100	-
				mg	
	Eyes - Mild irritant	Rabbit	-	870 μg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Pig	-	24 hours 250 µl	-
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Skin - Moderate irritant	Rabbit	-	500 mg	-
2-Butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
•	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
1-Methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

#### **Sensitization**

There is no data available.

#### **Mutagenicity**

There is no data available.

#### **Carcinogenicity**

#### **Classification**

Product/ingredient name	OSHA	IARC	NTP
Toluene	-	3	-
2-Butoxyethanol	-	3	-

#### Reproductive toxicity

There is no data available.

#### **Teratogenicity**

There is no data available.

#### Specific target organ toxicity (single exposure)

Name	Category	Target organs
Acetone Toluene 1-Methoxy-2-propanol	5 - 7 -	Narcotic effects Narcotic effects Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Name	Category	Target organs
Toluene		bladder, hearing organs, kidneys, liver and respiratory system

#### **Aspiration hazard**

Name	Result
Toluene	ASPIRATION HAZARD - Category 1

# Information on the likely routes of exposure

: Dermal contact. Eye contact. Inhalation. Ingestion.

#### Potential acute health effects

**Eye contact** 

: Causes serious eye irritation.

Inhalation

: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.



# **Section 11. Toxicological information**

**Skin contact**: Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and

enters airways.

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

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

**Ingestion**: Adverse symptoms may include the following:

nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations

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

**Short term exposure** 

**Potential immediate**: No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

**Potential immediate** : No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

**General**: May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.



# **Section 11. Toxicological information**

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

Route	ATE value
Dermal	37221.3 mg/kg 44649.3 mg/kg 446.5 mg/L

# **Section 12. Ecological information**

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Acetone	Acute EC50 7200000 μg/L Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 6000000 µg/L Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 6900 mg/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 4.95 mg/L Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
Toluene	Acute EC50 11600 μg/L Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 μg/L Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Chronic NOEC 2 mg/L Fresh water	Daphnia - Daphnia magna	21 days
2-Butoxyethanol	Acute EC50 >1000 mg/L Fresh water	Daphnia - Daphnia magna	48 hours
•	Acute LC50 800000 µg/L Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1250000 µg/L Marine water	Fish - Menidia beryllina	96 hours

#### Persistence and degradability

There is no data available.

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
Acetone	-0.23	-	low
Toluene	2.73	90	low
2-Butoxyethanol	0.81	-	low
1-Methoxy-2-propanol	<1	-	low

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

#### Other adverse effects

: No known significant effects or critical hazards.

## Section 13. Disposal considerations

#### **Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.



# Section 13. Disposal considerations

#### United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS#	Reference number
Acetone	67-64-1	U002
Toluene	108-88-3	U220

# **Section 14. Transport information**

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1950	UN1950	UN1950	UN1950
UN proper shipping name	Aerosols, flammable (each not exceeding 1 L capacity)	Aerosols, flammable (each not exceeding 1 L capacity)	Aerosols, flammable (each not exceeding 1 L capacity)	Aerosols, flammable (each not exceeding 1 L capacity)
Transport hazard class(es)	2.1	2.1	2.1	2.1
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

**AERG** : 126

DOT-RQ Details : Toluene 1000 lbs / 454 kg [137.86 gal / 521.84 L] Acetone 5000 lbs / 2270 kg [758.12 gal / 2869.8 L]

**Additional information** 

DOT Classification : Reportable quantity 7891.4 lbs / 3582.7 kg [994.17 gal / 3763.3 L]. Package sizes

shipped in quantities less than the product reportable quantity are not subject to the RQ

(reportable quantity) transportation requirements.

**TDG Classification**: Product classified as per the following sections of the Transportation of Dangerous

Goods Regulations: 2.13-2.17 (Class 2).

**IMDG** : **Emergency schedules** F-D, S-U

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

# **Section 15. Regulatory information**

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: Toluene Clean Water Act (CWA) 311: Toluene

Clean Air Act (CAA) 112 regulated flammable substances: Propane; Butane

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602

: Not listed

Class I Substances



# Section 15. Regulatory information

**Clean Air Act Section 602** 

**Class II Substances** 

: Not listed

Class II Substances

**DEA List I Chemicals** (Precursor Chemicals)

: Not listed

DEA List II Chemicals

(Essential Chemicals)

: Listed

**SARA 302/304** 

**Composition/information on ingredients** 

No products were found.

SARA 304 RQ : Not applicable.

**SARA 311/312** 

Classification : FLAMMABLE AEROSOLS - Category 1

GASES UNDER PRESSURE - Compressed gas SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (bladder, hearing

organs, kidneys, liver, respiratory system) - Category 2

ASPIRATION HAZARD - Category 1

#### **Composition/information on ingredients**

Name	Classification
Acetone	FLAMMABLE LIQUIDS - Category 2
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects)
	- Category 3
Toluene	FLAMMABLE LIQUIDS - Category 2
	SKIN CORROSION/IRRITATION - Category 2
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
	TOXIC TO REPRODUCTION (Unborn child) - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects)
	- Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (bladder,
	hearing organs, kidneys, liver, respiratory system) - Category 2
	ASPIRATION HAZARD - Category 1
2-Butoxyethanol	FLAMMABLE LIQUIDS - Category 4
	ACUTE TOXICITY (oral) - Category 4
	ACUTE TOXICITY (dermal) - Category 4
	ACUTE TOXICITY (inhalation) - Category 4
	SKIN CORROSION/IRRITATION - Category 2
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
1-Methoxy-2-propanol	FLAMMABLE LIQUIDS - Category 3
	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects)
	- Category 3

#### **SARA 313**

	Product name	CAS number
Form R - Reporting requirements		108-88-3 111-76-2
Supplier notification		108-88-3 111-76-2

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.



# Section 15. Regulatory information

#### State regulations

Massachusetts : The following components are listed: Acetone; Propane; Butane; 2-Butoxyethanol;

1-Methoxy-2-propanol; Asphalt; Distillates (petroleum), solvent-dewaxed heavy

paraffinic; Toluene

New York : The following components are listed: Acetone; Toluene

New Jersey : The following components are listed: Acetone; Propane; Butane; 2-Butoxyethanol;

1-Methoxy-2-propanol; Asphalt; Asphalt, oxidized; Toluene

Pennsylvania: The following components are listed: Acetone; Propane; Butane; 2-Butoxyethanol;

1-Methoxy-2-propanol; Asphalt; Soybean oil; Toluene

#### California Prop. 65

WARNING: This product can expose you to Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

#### Canada

**Canadian lists** 

Canadian NPRI: The following components are listed: Acetone; Propane; Butane; 2-Butoxyethanol;

Toluene

**CEPA Toxic substances**: The following components are listed: Acetone; 2-Butoxyethanol

Canada inventory (DSL : All components are listed or exempted.

NDSL)

## Section 16. Other information

#### Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	On basis of test data
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (bladder, hearing	Calculation method
organs, kidneys, liver, respiratory system) - Category 2	
ASPIRATION HAZARD - Category 1	Expert judgment
AQUATIC HAZARD (ACUTE) - Category 3	Calculation method

#### **History**

Date of issue mm/dd/yyyy : 09/15/2018

Date of previous issue : Not applicable

Version : 1

Prepared by : KMK Regulatory Services Inc.

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