SAFETY DATA SHEET



Section 1. Identification

GHS product identifier

Document product code

Other means of identification

: Not available.

Product type

: Liquid.

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

Identified uses :

Supplier/Manufacturer

Emergency telephone number (with hours of operation)

÷

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 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
AQUATIC HAZARD (ACUTE) - Category 2

GHS label elements

Hazard pictograms







Signal word : Danger



Section 2. Hazards identification

Hazard statements

- : H225 Highly flammable liquid and vapor.
 - 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)
 - H401 Toxic to aquatic life.

Precautionary statements

Prevention

Response

- 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.
- P241 Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P233 Keep container tightly closed.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P260 Do not breathe vapor.
- P264 Wash hands thoroughly after handling.
- : P314 Get medical attention if you feel unwell.
 - P308 + P313 IF exposed or concerned: Get medical attention. P304 + P310 - 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.
 - P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated
 - clothing. Rinse skin with water or shower.

 - 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 eve irritation persists: Get medical attention.

Storage

- : P405 Store locked up.
 - P403 Store in a well-ventilated place.
 - P235 Keep cool.

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

Other means of identification

- : Mixture
- : Not available.



Section 3. Composition/information on ingredients

| Ingredient name | % | CAS number |
|------------------------|-----------|------------|
| Toluene | ≥50 - ≤75 | 108-88-3 |
| N-methyl-2-pyrrolidone | ≤0.3 | 872-50-4 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

Eve 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.

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

redness



Section 4. First aid measures

Inhalation : Adverse symptoms may include the following:

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

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet or water-based fire extinguishers.

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. 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. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is toxic 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. 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). 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 release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.



Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. 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 |
|------------------------|--|
| 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. |
| N-methyl-2-pyrrolidone | AIHA WEEL (United States, 10/2011). Absorbed through skin. |
| • | TWA: 10 ppm 8 hours. |
| | |

Canada

Occupational exposure limits

| Ingredient name | Exposure limits |
|------------------------|---|
| 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, 7/2016). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 7/2015). 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. |
| N-methyl-2-pyrrolidone | CA Ontario Provincial (Canada, 7/2015). TWA: 400 mg/m³ 8 hours. |

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.



Section 8. Exposure controls/personal protection

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.
Color : Green.

Odor : Solvent. [Strong]
Odor threshold : 2 to 40 ppm
pH : Not available.

Melting point : -95°C (-139°F)
Boiling point : 111°C (231.8°F)

Flash point : Closed cup: -3°C (26.6°F)
Evaporation rate : 2.24 (Butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Lower: 1.2% Upper: 7.1%

: Lower: 1.2% Upper: 7.1%: Not available.: 3.1 [Air = 1]

Relative density : 0.9

Solubility : Insoluble in water.

Partition coefficient: noctanol/water : Not available.



Vapor pressure

Vapor density

Section 9. Physical and chemical properties

Auto-ignition temperature : 480°C (896°F) **Decomposition temperature** : Not available.

Viscosity : Dynamic (room temperature): 1000 mPa·s (1000 cP)

Flow time (ISO 2431) : Not available.

VOC = Volatile Organic

Compound

Section 10. Stability and reactivity

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

Chemical stability: The product is stable.

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). Do not pressurize, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not

allow vapor to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, strong

reducing agents, halogen compounds.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-----------------------------------|---|---------|---------------------------------|--------------|
| Toluene N-methyl-2-pyrrolidone | LC50 Inhalation Vapor LD50 Dermal LD50 Oral | Rabbit | 49 g/m³ 8 g/kg 3914 mg/kg | 4 hours - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|-----------------|-------------|
| 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 | - |
| N-methyl-2-pyrrolidone | Eyes - Moderate irritant | Rabbit | - | 100 mg | - |

Sensitization

There is no data available.

Mutagenicity

There is no data available.



Section 11. Toxicological information

Carcinogenicity

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| Toluene | - | 3 | - |

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

| Name | Category | Target organs |
|-----------------------------------|----------|--|
| Toluene N-methyl-2-pyrrolidone | 5 - 7 - | Narcotic effects Respiratory tract irritation |

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.

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:

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



Section 11. Toxicological information

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

effects

: No known significant effects or critical hazards.

_

Potential delayed effects : No know

: 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.

Transfer as in the control of the cont

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.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|-----------------------------------|---|----------|
| 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 |

Persistence and degradability

There is no data available.

Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| Toluene | 2.73 | 90 | low |
| N-methyl-2-pyrrolidone | -0.46 | - | low |

Mobility in soil

Soil/water partition : N coefficient (Koc)

: Not available.



Section 12. Ecological information

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. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

| Ingredient | CAS# | | Reference number |
|------------|----------|--------|---------------------|
| Toluene | 108-88-3 | Listed | U220 |

Section 14. Transport information

| | DOT Classification | TDG Classification | IMDG | IATA |
|----------------------------|--------------------|--------------------|-----------|-----------|
| UN number | UN1133 | UN1133 | UN1133 | UN1133 |
| UN proper shipping name | ADHESIVES | ADHESIVES | ADHESIVES | ADHESIVES |
| Transport hazard class(es) | 3 | 3 | 3 | 3 |
| Packing group | II | II | II | II |
| Environmental hazards | No. | No. | No. | No. |

AERG: 128

DOT-RQ Details

Additional information

DOT Classification

: Toluene

1000 lbs / 454 kg [137.86 gal / 521.84 L]

: Reportable quantity 1399.6 lbs / 635.41 kg [186.51 gal / 706.01 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

Special provisions 383

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).

IMDG : <u>Emergency schedules</u> F-E, S-D



Section 14. Transport information

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) PAIR: 2-Methoxy-1-methylethyl acetate

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; Chromium (III) oxide

Clean Water Act (CWA) 311: Toluene

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

DEA List I Chemicals
(Procursor Chemicals)

: Not listed

(Precursor Chemicals)

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 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

Composition/information on ingredients

| Name | Classification |
|----------------------------------|--|
| Toluene N. methyl 2 pyrrelidene | 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 |
| N-methyl-2-pyrrolidone | FLAMMABLE LIQUIDS - Category 4 SKIN CORROSION/IRRITATION - Category 2 |



Section 15. Regulatory information

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SARA 313

| | Product name | CAS number |
|---------------------------------|--------------|------------|
| Form R - Reporting requirements | Toluene | 108-88-3 |
| Supplier notification | Toluene | 108-88-3 |

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.

State regulations

Massachusetts: The following components are listed: TolueneNew York: The following components are listed: TolueneNew Jersey: The following components are listed: ToluenePennsylvania: The following components are listed: Toluene

California Prop. 65

WARNING: This product can expose you to chemicals including Toluene, N-methyl-2-pyrrolidone, which are 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: Toluene

CEPA Toxic substances : None of the components are listed.

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

NDSL)

Section 16. Other information

Procedure used to derive the classification

| Classification | Justification |
|---|-----------------------|
| FLAMMABLE LIQUIDS - Category 2 | 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) - Category 3 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (bladder, hearing organs, kidneys, liver, respiratory system) - Category 2 | Calculation method |
| ASPIRATION HAZARD - Category 1 | Expert judgment |
| AQUATIC HAZARD (ACUTE) - Category 2 | Calculation method |

History

Date of issue mm/dd/yyyy : 04/30/2018

Date of previous issue : Not applicable

Version : 1

Prepared by : KMK Regulatory Services Inc.



Section 16. Other information

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

