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# SAFETY DATA SHEET

## Section 1. Identification

<table>
<thead>
<tr>
<th>Product code</th>
<th>150100/FB59</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS product identifier</td>
<td>MRC LOW VOC</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Identified uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorant; Printing ink related material; Printing ink.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manufacturer / Distributor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun Chemical Corporation North American Inks 135 West Lake Street Northlake, IL 60164 US: +1 708 236 3798</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency telephone number (with hours of operation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1 (800) 424-9300 (U.S.) (24 hours) +1 (703) 527-3887 (International) (24 hours)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other information</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1 708 236 3798</td>
</tr>
</tbody>
</table>

## 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
- ACUTE TOXICITY (oral) - Category 4
- ACUTE TOXICITY (dermal) - Category 4
- SKIN IRRITATION - Category 2
- EYE IRRITATION - Category 2A
- TOXIC TO REPRODUCTION (Unborn child) - Category 2
- SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (eyes) - Category 1
- SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
- SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
- ASPIRATION HAZARD - Category 1

### GHS label elements

#### Hazard pictograms

![Hazard Pictograms](image)

### Signal word

Danger

### Hazard statements

Highly flammable liquid and vapor. Harmful if swallowed or in contact with skin. Causes serious eye irritation. Causes skin irritation. Suspected of damaging the unborn child. May be fatal if swallowed and enters airways. Causes damage to organs. (eyes) May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements
Section 2. Hazards identification

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response

Get medical attention if you feel unwell. IF exposed: Call a POISON CENTER or physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. 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 attention.

Storage

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

Disposal

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

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetone</td>
<td>67-64-1</td>
<td>50 - 80</td>
</tr>
<tr>
<td>toluene</td>
<td>108-88-3</td>
<td>20 - 25</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>67-56-1</td>
<td>10 - 20</td>
</tr>
</tbody>
</table>

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

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 10 minutes. Get medical attention. If necessary, call a poison center or physician.

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

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Section 4. First aid measures

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

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

Skin contact:
- Harmful in contact with skin. Causes skin irritation.

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

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician

- Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- No specific treatment.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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.

Specific hazards arising from the chemical
- Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products
- Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide

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

Environmental precautions

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 fires, 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".

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large 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. 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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.
Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
</table>
| acetone         | ACGIH TLV (United States, 3/2016).  
  STEL: 500 ppm 15 minutes.  
  TWA: 250 ppm 8 hours.  
  OSHA PEL (United States, 2/2013).  
  TWA: 2400 mg/m³ 8 hours.  
  TWA: 1000 ppm 8 hours.  
  STEL: 2400 mg/m³ 15 minutes.  
  STEL: 1000 ppm 15 minutes.  
  TWA: 1800 mg/m³ 8 hours.  
  TWA: 750 ppm 8 hours.  |
  STEL: 560 mg/m³ 15 minutes.  
  STEL: 150 ppm 15 minutes.  
  TWA: 375 mg/m³ 8 hours.  
  TWA: 100 ppm 8 hours.  
  OSHA PEL Z2 (United States, 2/2013).  
  AMP: 500 ppm 10 minutes.  
  CEIL: 300 ppm  
  TWA: 200 ppm 8 hours.  |
| Methyl Alcohol  | ACGIH TLV (United States, 3/2016).  
  STEL: 328 mg/m³ 15 minutes.  
  STEL: 250 ppm 15 minutes.  
  TWA: 262 mg/m³ 8 hours.  
  TWA: 200 ppm 8 hours.  |

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
</table>
| acetone         | OSHA PEL (United States, 2/2013).  
  TWA: 2400 mg/m³ 8 hours.  
  TWA: 1000 ppm 8 hours.  |
  Absorbed through skin.  
  STEL: 328 mg/m³ 15 minutes.  
  STEL: 250 ppm 15 minutes.  
  TWA: 262 mg/m³ 8 hours.  
  TWA: 200 ppm 8 hours.  |
| toluene         | OSHA PEL (United States, 2/2013).  
  TWA: 2400 mg/m³ 8 hours.  
  TWA: 1000 ppm 8 hours.  |
  Absorbed through skin.  
  STEL: 328 mg/m³ 15 minutes.  
  STEL: 250 ppm 15 minutes.  
  TWA: 262 mg/m³ 8 hours.  
  TWA: 200 ppm 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. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### 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.
Section 8. Exposure controls/personal protection

Hand protection:
In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or estimated concentrations of chemical substances. If a risk assessment indicates this is necessary, use a properly fitted air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

Skin protection:

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.

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 anti-static 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:
In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9. Physical and chemical properties

Appearance:

Physical state: Liquid.
Color: Clear.
Odor: Characteristic.
Odor threshold: Not applicable.
pH: Not tested
Melting point: Not available.
Boiling point: Lowest known value: 56°C (133°F)
Flash point: -18°C
VOC % (w/w): 41.19
Evaporation rate: Highest known value: 6.06 (acetone) Weighted average: 4.4 compared with butyl acetate

Flammability (solid, gas):
Lower and upper explosive (flammable) limits: Lower: 2.2% Upper: 13%
Vapor pressure: 17.9 kPa (134.6 mm Hg) [room temperature]
Vapor density: 2 [Air = 1]
Density: 0.807 g/cm³ (6.734 lbs/gal)
Solubility: Not tested
Partition coefficient: n-octanol/water: Not applicable.

Auto-ignition temperature: 465°C (869°F)
Decomposition temperature: Not applicable.
Viscosity: Kinematic (40°C): <0.205 cm²/s (<20.5 cSt)
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.

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

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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetone</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>5800 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>toluene</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>28.1 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>64000 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>15800 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>5600 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary : No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Eyes : No known significant effects or critical hazards.

Respiratory : No known significant effects or critical hazards.

Sensitization

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Respiratory : No known significant effects or critical hazards.

Mutagenicity

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>toluene</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

Reproductive toxicity

Conclusion/Summary

Teratogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)
Section 11. Toxicological information

Information on the likely routes of exposure

**Inhalation:**
- Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

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

**Skin contact:**
- Harmful in contact with skin. Causes skin irritation.
- Causes serious eye irritation.

**Eye contact:**
- Pain or irritation
- Watering
- Redness
- Nausea or vomiting
- Headache
- Drowsiness/fatigue
- Dizziness/vertigo
- Unconsciousness
- Reduced fetal weight
- Increase in fetal deaths
- Skeletal malformations

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

**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

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetone</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Narcotic effects</td>
</tr>
<tr>
<td>toluene</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Narcotic effects eyes</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>Category 1</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Aspiration hazard**

<table>
<thead>
<tr>
<th>Name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>toluene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>toluene</td>
<td>Category 2</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Information on the likely routes of exposure**
- Not available.

**Potential acute health effects**

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>Harmful in contact with skin. Causes skin irritation.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>Harmful if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.</td>
</tr>
</tbody>
</table>

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

**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

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

**Short term exposure**
- Not available.

**Potential immediate effects**
- Not available.

**Potential delayed effects**
- Not available.
Section 11. Toxicological information

Long term exposure
Potential immediate effects : Not available.
Potential delayed effects : Not available.

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.

Numerical measures of toxicity
Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>509.7 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>1529.1 mg/kg</td>
</tr>
</tbody>
</table>

Section 12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetone</td>
<td>Acute LC50 7550000 µg/l Fresh water</td>
<td>Crustaceans - Asellus aquaticus</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 10000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 8300000 µg/l Fresh water</td>
<td>Fish - Lepomis macrochirus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 6000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>48 hours</td>
</tr>
<tr>
<td>toluene</td>
<td>Acute LC50 15500 µg/l Marine water</td>
<td>Crustaceans - Palaemonetes pugio</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 5500 µg/l Fresh water</td>
<td>Fish - Oncorhynchus kisutch - FRY</td>
<td>96 hours</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>Chronic NOEC 280000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 2500000 µg/l Marine water</td>
<td>Crustaceans - Crangon crangon - Adult</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 3289 to 4395 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 290 mg/l Fresh water</td>
<td>Fish - Danio rerio - Egg</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetone</td>
<td>-0.23</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>toluene</td>
<td>2.73</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>-0.77</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

| Soil/water partition coefficient (K<sub>oc</sub>) | 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 at all times 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 emptied 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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Status</th>
<th>Reference number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (I); 2-Propanone (I)</td>
<td>67-64-1</td>
<td>Listed</td>
<td>U002</td>
</tr>
<tr>
<td>Toluene; Benzene, methyl-</td>
<td>108-88-3</td>
<td>Listed</td>
<td>U220</td>
</tr>
<tr>
<td>Methanol (I); Methyl alcohol (I)</td>
<td>67-56-1</td>
<td>Listed</td>
<td>U154</td>
</tr>
</tbody>
</table>

Section 14. Transport information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>Mexico Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN1993</td>
<td>UN1993</td>
<td>UN1993</td>
<td>UN1993</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>FLAMMABLE LIQUIDS, N.O.S. (CONTAINS: ACETONE, TOLUENE, METHANOL)</td>
<td>FLAMMABLE LIQUIDS, N.O.S. (CONTAINS: ACETONE, TOLUENE, METHANOL)</td>
<td>FLAMMABLE LIQUIDS, N.O.S. (CONTAINS: ACETONE, TOLUENE, METHANOL)</td>
<td>FLAMMABLE LIQUIDS, N.O.S. (CONTAINS: ACETONE, TOLUENE, METHANOL)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
<td>II</td>
<td>II</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Additional information</td>
<td>-</td>
<td>Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).</td>
<td>-</td>
<td>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</td>
</tr>
</tbody>
</table>
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

TSCA 8(b) inventory: Listed
U.S. Federal regulations:
- TSCA 4(a) final test rules: Acetaldehyde
- TSCA 8(a) PAIR: Acetaldehyde
- Clean Water Act (CWA) 307: benzene; toluene
- Clean Water Act (CWA) 311: Acetaldehyde; benzene; toluene

SARA 313

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>21.56</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>19.62</td>
</tr>
</tbody>
</table>

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.

Toxics in Packaging (CONEG): In compliance.

Canada inventory: All components are listed or exempted.

International regulations

International lists:
- Australia inventory (AICS): All components are listed or exempted.
- China inventory (IECSC): All components are listed or exempted.
- Japan inventory (ENCS): All components are listed or exempted.
- Korea inventory: All components are listed or exempted.
- Malaysia Inventory (EHS Register): Not determined.
- New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
- Philippines inventory (PICCS): All components are listed or exempted.
- Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted.
- Turkey inventory: Not determined.
- Europe Inventory: Please contact your supplier to get the information.

Section 16. Other information

National Fire Protection Association (U.S.A.)

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited numbers of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue/Date of revision: 6/28/2017
Date of previous issue: 6/27/2017
### Section 16. Other information

**Version** : 5

**Key to abbreviations** :
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- UN = United Nations

<table>
<thead>
<tr>
<th>References</th>
<th>Not available.</th>
</tr>
</thead>
</table>

**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.
# VOLATILE COMPONENT INFORMATION

A. Product Density:

1.) 0.807 g/cm³ (6.734 lbs/gal)  

B. Nonvolatile Content:

1.) 0.0 Weight percent of nonvolatiles in product  
2.) 0.0 Volume percent of nonvolatiles in product  
3.) 0 Density, lb nonvolatiles/gal nonvolatiles  

C. Volatiles:

1.) 100.0 Weight percent of total volatiles in product  
2.) 6.73 Density, lb volatiles/gal volatiles  

D. Water Content:

1.) 0.3 Weight percent of water in product  
2.) 0.2 Volume percent of water in product  

E. Volatile Organic Compounds, (VOCs):

1.) 41.2 Weight percent of organic volatiles in product  
2.) 40.0 Volume percent of organic volatiles in product  
3.) 6.92 Density, lb organic volatiles/gal organic volatiles  
4.) 41.2 Weight percent of VOCs in total volatiles  
5.) 40.1 Volume percent of VOCs in total volatiles  

F. VOC Content in Product Expressed in Other Terms:

1.) a.) 2.8 lb VOC / gal Product  
1.) b.) 332.34 grams VOC / liter Product  
2.) a.) 6.9 lb VOC / gal Product less water & exempt solvent  
2.) b.) 829.31 grams VOC / liter Product less water & exempt solvent  
2.) c.) 100.0 Weight percent of organic volatiles (VOC) in Product less water & exempt solvents.  
3.) 0.0 lb VOC / gal total nonvolatiles
### G. Volatiles

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS number</th>
<th>% by weight</th>
<th>Density (lb/gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) Hazardous Air Pollutants VOCs (HAPs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>toluene</td>
<td>108-88-3</td>
<td>21.6</td>
<td>7.23</td>
</tr>
<tr>
<td>Methyl Alcohol</td>
<td>67-56-1</td>
<td>19.6</td>
<td>6.6</td>
</tr>
<tr>
<td>benzene</td>
<td>71-43-2</td>
<td>0.0</td>
<td>7.33</td>
</tr>
<tr>
<td>2.) Other VOCs (Non-HAPs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.) water</td>
<td>7732-18-5</td>
<td>0.3</td>
<td>8.34</td>
</tr>
<tr>
<td>4.) Ammonia (reported as CAS# 7664-41-7; includes CAS# 1336-21-6)</td>
<td>7664-41-7</td>
<td>0.0</td>
<td>5.99</td>
</tr>
<tr>
<td>5.) Other Non-VOC, Non-HAP Volatiles</td>
<td>58.5</td>
<td>6.6</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: The term Volatile Organic Compounds (VOC) refers only to volatile organic materials as defined by the US EPA and does not include water, ammonia, acetone or other exempt solvents. Unless otherwise stated, the VOC values reported above are based on materials of construction.