Safety Data Sheet

Section 1. Identification

1.1 Product identifier
Product name: ASTM D5580 Valve Timing Calibration Blend, Part Number G3440-85004
Part no.: G3440-85004
Validation date: 11/2/2021

1.2 Relevant identified uses of the substance or mixture and uses advised against
Material uses: Reagents and Standards for Analytical Chemistry Laboratory Use
1 ml

1.3 Details of the supplier of the safety data sheet
Supplier/Manufacturer: Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number
In case of emergency: CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture
OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture:

H225
FLAMMABLE LIQUIDS - Category 2
H315
SKIN IRRITATION - Category 2
H319
EYE IRRITATION - Category 2A
H340
GERM CELL MUTAGENICITY - Category 1
H350
CARCINOGENICITY - Category 1A
H361
TOXIC TO REPRODUCTION - Category 2
H335
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
H336
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H372
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
H304
ASPIRATION HAZARD - Category 1
H400
AQUATIC HAZARD (ACUTE) - Category 1
H410
AQUATIC HAZARD (LONG-TERM) - Category 1

2.2 GHS label elements
Hazard pictograms:

Signal word: Danger

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Section 2. Hazards identification

Hazard statements:
- H225 - Highly flammable liquid and vapor.
- H304 - May be fatal if swallowed and enters airways.
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H336 - May cause drowsiness or dizziness.
- H340 - May cause genetic defects.
- H350 - May cause cancer.
- H361 - Suspected of damaging fertility or the unborn child.
- H372 - Causes damage to organs through prolonged or repeated exposure.
- H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention:
- P201 - Obtain special instructions before use.
- P280 - Wear protective gloves, protective clothing and eye or face protection.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 - Use explosion-proof electrical, ventilating or lighting equipment.
- P242 - Use non-sparking tools.
- P243 - Take action to prevent static discharges.
- P240 - Ground and bond container and receiving equipment.
- P273 - Avoid release to the environment.
- P260 - Do not breathe vapor.
- P270 - Do not eat, drink or smoke when using this product.
- P264 - Wash thoroughly after handling.

Response:
- P391 - Collect spillage.
- P308 + P313 - IF exposed or concerned: Get medical advice or attention.
- P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
- P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
- P362 + P364 - Take off contaminated clothing and wash it before reuse.
- P302 + P352 - IF ON SKIN: Wash with plenty of water.
- 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 advice or attention.

Storage:
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
- P403 + P235 - Keep cool.

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

Supplemental label elements:
- Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and receiving equipment. These alone may be insufficient to remove static electricity.

2.3 Other hazards:
- Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor may cause flash fire or explosion.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
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<tbody>
<tr>
<td>2,2,4-trimethylpentane</td>
<td>≥50 - ≤75</td>
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<td>Hexan-2-one</td>
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<td>ethylbenzene</td>
<td>≤10</td>
<td>100-41-4</td>
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<td>o-xylene</td>
<td>≤10</td>
<td>95-47-6</td>
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<tr>
<td>benzene</td>
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<td>71-43-2</td>
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<tr>
<td>Toluene</td>
<td>≤5</td>
<td>108-88-3</td>
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</table>

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Section 3. Composition/information on ingredients

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 and hence require reporting in this section.

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

Section 4. First aid measures

4.1 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.

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. 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. 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. 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.

4.2 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. May cause respiratory irritation.

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

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

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Section 4. First aid measures

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

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.

Specific treatments
No specific treatment.

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

4.3.1 Indication of immediate medical attention

Specific treatments
No specific treatment.

Notes to physician
Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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

5.1 Extinguishing media

Suitable extinguishing media
Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media
Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical
Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static accumulation may be significantly increased by the presence of small quantities of water or other contaminants. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. 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

5.3 Advice for firefighters

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.

See toxicological information (Section 11)
Section 6. Accidental release measures

6.1 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".

6.2 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. Collect spillage.

Section 7. Handling and storage

7.1 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. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Restrict flow velocity according to API 2003 (2008), NFPA 77 (2007), and Laurence Britton, "Avoiding Static Ignition Hazards in Chemical Operations". To reduce potential for static discharge, ensure that all equipment is properly grounded and bonded and meets appropriate electrical classification requirements.

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.
Section 7. Handling and storage

7.2 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.

7.3 Specific end use(s)

Recommendations

Industrial sector specific solutions

Industrial applications, Professional applications.

Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2,4-trimethylpentane</td>
<td>ACGIH TLV (United States, 1/2021). TWA: 300 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 20 mg/m³ 8 hours.</td>
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<td></td>
<td>NIOSH REL (United States, 10/2020). TWA: 1 ppm 10 hours.</td>
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<td>TWA: 4 mg/m³ 10 hours.</td>
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<td></td>
<td>ACGIH TLV (United States, 1/2021). Absorbed through skin.</td>
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<td>TWA: 5 ppm 8 hours.</td>
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<td>STEL: 10 ppm 15 minutes.</td>
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<td>Hexan-2-one</td>
<td>OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours.</td>
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<td>TWA: 410 mg/m³ 8 hours.</td>
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<td>TWA: 20 ppm 8 hours.</td>
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<td>TWA: 343 mg/m³ 8 hours.</td>
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<td>STEL: 125 ppm 15 minutes.</td>
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<td>STEL: 545 mg/m³ 15 minutes.</td>
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<td>o-xylene</td>
<td>NIOSH REL (United States, 10/2020). TWA: 100 ppm 10 hours.</td>
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<td>TWA: 100 ppm 8 hours.</td>
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**Section 8. Exposure controls/personal protection**

<table>
<thead>
<tr>
<th>Compound</th>
<th>TWA: 435 mg/m³ 8 hours.</th>
<th>STEL: 150 ppm 15 minutes.</th>
<th>STEL: 655 mg/m³ 15 minutes.</th>
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<th>STEL: 655 mg/m³ 15 minutes.</th>
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<th>TWA: 435 mg/m³ 8 hours.</th>
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<td>Benzene</td>
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### 8.2 Exposure controls

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

#### 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.

##### 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 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
- 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 and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### Appearance
- **Physical state**: Liquid. [Clear.]
- **Color**: Colorless.
- **Odor**: Not available.
- **Odor threshold**: Not available.
- **pH**: Not available.
- **Melting point/freezing point**: -116°C (-176.8°F)
- **Boiling point, initial boiling point, and boiling range**: 99°C (210.2°F)
- **Flash point**: Closed cup: -12°C (10.4°F)
- **Evaporation rate**: >1 (butyl acetate = 1)
- **Flammability**: Not applicable.
- **Lower and upper explosion limit/flammability limit**: Lower: 1.1%  
Upper: 6%
Section 9. Physical and chemical properties and safety characteristics

Vapor pressure: <5.5 kPa (<41 mm Hg)
Relative vapor density: Not available.
Relative density: 0.69
Density: 0.69 g/cm³
Solubility: Easily soluble in the following materials: acetone.
Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water: Not applicable.
Auto-ignition temperature:

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>°C</th>
<th>°F</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2,4-trimethylpentane</td>
<td>418</td>
<td>784.4</td>
<td></td>
</tr>
<tr>
<td>Hexan-2-one</td>
<td>423</td>
<td>793.4</td>
<td></td>
</tr>
</tbody>
</table>
Decomposition temperature: Not available.
Viscosity: Not available.

Section 10. Stability and reactivity

10.1 Reactivity: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability: The product is stable.
10.3 Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 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.
10.5 Incompatible materials: Reactive or incompatible with the following materials:
- oxidizing materials
- Reactive or incompatible with the following materials: alkalis.
- Incompatible with: Metal salt.
10.6 Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 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>2,2,4-trimethylpentane</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat - Male, Female</td>
<td>&gt;33.52 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td></td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Hexan-2-one</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>8000 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>4800 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2590 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>LC50 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>3500 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>o-xylene</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>27.559 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td>benzene</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>930 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Toluene</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>49 g/m³</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

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Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexan-2-one</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 15 mg</td>
<td>-</td>
</tr>
<tr>
<td>benzene</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>88 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rat</td>
<td>-</td>
<td>8 hours 60 uL</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 15 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 20 mg</td>
<td>-</td>
</tr>
<tr>
<td>Toluene</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>0.5 minutes 100 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>870 ug</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>435 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 20 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 mg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**

**Skin**
- Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Sensitization**
- Not available.

**Mutagenicity**
- Conclusion/Summary : Not available.

**Carcinogenicity**
- Conclusion/Summary : Not available.

**Classification**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>-</td>
<td>2B</td>
<td>-</td>
</tr>
<tr>
<td>o-xylene</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>benzene</td>
<td>+</td>
<td>1</td>
<td>Known to be a human carcinogen.</td>
</tr>
<tr>
<td>Toluene</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reproductive toxicity**
- Conclusion/Summary : Not available.

**Teratogenicity**
- Conclusion/Summary : Not available.

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

### Information on the likely routes of exposure

**Routes of entry anticipated:** Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact:** Causes serious eye irritation.

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

**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

---

**Name** | **Category** | **Route of exposure** | **Target organs**
---|---|---|---
2,2,4-trimethylpentane | Category 3 | - | Respiratory tract irritation
Hexan-2-one | Category 3 | - | Narcotic effects
ethylbenzene | Category 3 | - | Respiratory tract irritation
o-xylene | Category 3 | - | Narcotic effects
benzene | Category 3 | - | Respiratory tract irritation
Toluene | Category 3 | - | Narcotic effects

### Specific target organ toxicity (repeated exposure)

**Name** | **Category** | **Route of exposure** | **Target organs**
---|---|---|---
Hexan-2-one | Category 1 | - | Peripheral nervous system
ethylbenzene | Category 2 | - | Hearing organs
benzene | Category 1 | oral, inhalation | Haematopoietic system
Toluene | Category 2 | inhalation | Nervous system

### Aspiration hazard

**Name** | **Result**
---|---
ASTM D5580 Valve Timing Calibration Blend, Part Number G3440-85004 | ASPIRATION HAZARD - Category 1
2,2,4-trimethylpentane | ASPIRATION HAZARD - Category 1
ethylbenzene | ASPIRATION HAZARD - Category 1
o-xylene | ASPIRATION HAZARD - Category 1
benzene | ASPIRATION HAZARD - Category 1
Toluene | ASPIRATION HAZARD - Category 1
Section 11. Toxicological information

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 effects: Not available.
- Potential delayed effects: Not available.

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

Potential chronic health effects
- General: Causes damage to organs through prolonged or repeated exposure.
- Carcinogenicity: May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity: May cause genetic defects.
- Reproductive toxicity: Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapors) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM D5580 Valve Timing Calibration Blend, Part Number G3440-85004</td>
<td>4684.6</td>
<td>9741.7</td>
<td>N/A</td>
<td>61.1</td>
<td>N/A</td>
</tr>
<tr>
<td>Hexan-2-one</td>
<td>2590</td>
<td>4800</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>3500</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>o-xylene</td>
<td>3000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>benzene</td>
<td>930</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Toluene</td>
<td>636</td>
<td>N/A</td>
<td>N/A</td>
<td>49</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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Section 12. Ecological information

### 12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexan-2-one</td>
<td>Acute LC50 428000 µg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>Acute EC50 4900 µg/l Marine water</td>
<td>Algae - Skeletonema costatum</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 7700 µg/l Marine water</td>
<td>Algae - Skeletonema costatum</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 6.53 mg/l Marine water</td>
<td>Crustaceans - Artemia sp. - Nauplii</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 2.93 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td>O-xylene</td>
<td>Acute LC50 4200 µg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 10.7 mg/l Marine water</td>
<td>Crustaceans - Artemia sp. - Nauplii</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 1.39 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 7600 µg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td>Benzene</td>
<td>Chronic NOEC 1.57 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.714 mg/l Fresh water</td>
<td>Fish - Danio rerio</td>
<td>35 days</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 160000 µg/l Fresh water</td>
<td>Algae - Selenastrum sp.</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 9.23 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 21 mg/l Marine water</td>
<td>Crustaceans - Artemia salina</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 5.28 ul/L Fresh water</td>
<td>Fish - Oncorhynchus gorboschua - Fry</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic EC10 &gt;1360 mg/l Fresh water</td>
<td>Algae - Desmodesmus subspicatus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 98 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>21 days</td>
</tr>
<tr>
<td>Toluene</td>
<td>Chronic NOEC 1.5 to 5.4 ul/L Marine water</td>
<td>Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>4 weeks</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 &gt;433 ppm Marine water</td>
<td>Algae - Skeletonema costatum</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 11600 µg/l Fresh water</td>
<td>Crustaceans - Gammarus pseudolimnaeus - Adult</td>
<td>48 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></td>
<td>Acute LC50 5500 µg/l Fresh water</td>
<td>Fish - Oncorhynchus kisutch - Fry</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.74 mg/l</td>
<td>Daphnia - Ceriodaphnia dubia</td>
<td>7 days</td>
</tr>
</tbody>
</table>

### 12.2 Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Dose</th>
<th>Inoculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylbenzene</td>
<td>ISO OECD 301F Ready Biodegradability - Manometric Respirometry Test</td>
<td>70 to 80 % - Readily - 28 days 98 % - Readily - 28 days</td>
<td>-</td>
<td>Activated sludge</td>
</tr>
<tr>
<td>O-xylene</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### 12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2,4-trimethylpentane</td>
<td>-</td>
<td>-</td>
<td>Inherent</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>O-xylene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Benzene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Toluene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>
Section 12. Ecological information

<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>2,4-trimethylpentane</td>
<td>4.08</td>
<td>231</td>
<td>low</td>
</tr>
<tr>
<td>Hexan-2-one</td>
<td>1.38</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>3.6</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>o-xylene</td>
<td>3.12</td>
<td>8.1 to 25.9</td>
<td>low</td>
</tr>
<tr>
<td>benzene</td>
<td>2.13</td>
<td>11</td>
<td>low</td>
</tr>
<tr>
<td>Toluene</td>
<td>2.73</td>
<td>90</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

Soil/water partition coefficient (K<sub>OC</sub>): Not available.

12.5 Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

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>Xylene</td>
<td>95-47-6</td>
<td>Listed</td>
<td>U239</td>
</tr>
<tr>
<td>Benzene (I,T)</td>
<td>71-43-2</td>
<td>Listed</td>
<td>U019</td>
</tr>
<tr>
<td>Toluene; Benzene, methyl-</td>
<td>108-88-3</td>
<td>Listed</td>
<td>U220</td>
</tr>
</tbody>
</table>

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

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Section 14. Transport information

DOT / TDG / Mexico / IMDG / IATA  
Additional information  
Remarks: De minimis quantities

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.

Transport in bulk according to IMO instruments: Not available.

Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations

Clean Water Act (CWA) 307: ethylbenzene; benzene; Toluene
Clean Water Act (CWA) 311: ethylbenzene; o-xylene; benzene; 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 (Precursor Chemicals): Not listed
DEA List II Chemicals (Essential Chemicals): Not 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 IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
GERM CELL MUTAGENICITY - Category 1  
CARCINOGENICITY - Category 1A  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1  
ASPIRATION HAZARD - Category 1  
HOC - Static-accumulating flammable liquid

Composition/information on ingredients

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# Section 15. Regulatory information

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Classification</th>
</tr>
</thead>
</table>
| 2,2,4-trimethylpentane      | ≥50 - ≤75 | FLAMMABLE LIQUIDS - Category 2  
SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
ASPIRATION HAZARD - Category 1  
HNOC - Static-accumulating flammable liquid  
HNOC - Defatting irritant |
| Hexan-2-one                 | ≥10 - ≤19 | FLAMMABLE LIQUIDS - Category 3  
EYE IRRITATION - Category 2B  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |
| ethylbenzene                | ≤10     | FLAMMABLE LIQUIDS - Category 3  
ACUTE TOXICITY (inhalation) - Category 4  
EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
HNOC - Static-accumulating flammable liquid  
HNOC - Defatting irritant |
| o-xylene                    | ≤10     | FLAMMABLE LIQUIDS - Category 3  
ACUTE TOXICITY (dermal) - Category 4  
ACUTE TOXICITY (inhalation) - Category 4  
SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1  
ASPIRATION HAZARD - Category 1  
HNOC - Static-accumulating flammable liquid  
HNOC - Defatting irritant |
| benzene                     | ≤10     | FLAMMABLE LIQUIDS - Category 2  
ACUTE TOXICITY (oral) - Category 4  
SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
GERM CELL MUTAGENICITY - Category 1B  
CARCINOGENICITY - Category 1A  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1  
ASPIRATION HAZARD - Category 1  
HNOC - Defatting irritant |
| Toluene                     | ≤10     | FLAMMABLE LIQUIDS - Category 2  
ACUTE TOXICITY (oral) - Category 4  
SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
HNOC - Defatting irritant |

**SARA 313**
Section 15. Regulatory information

### Form R - Reporting requirements

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>≤10</td>
</tr>
<tr>
<td>o-xylene</td>
<td>95-47-6</td>
<td>≤10</td>
</tr>
<tr>
<td>benzene</td>
<td>71-43-2</td>
<td>≤5</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>≤5</td>
</tr>
</tbody>
</table>

### Supplier notification

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>≤10</td>
</tr>
<tr>
<td>o-xylene</td>
<td>95-47-6</td>
<td>≤10</td>
</tr>
<tr>
<td>benzene</td>
<td>71-43-2</td>
<td>≤5</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>≤5</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.

### State regulations

**Massachusetts**

The following components are listed: ISOOCTANE; METHYL BUTYL KETONE; METHYL N-BUTYL KETONE; 2-HEXANONE; ETHYL BENZENE; O-XYLENE; O-DIMETHYLBENZENE; BENZENE; BENZOL DILUENT; TOLUENE; TOLUOL; METHYLBENZENE

**New York**

The following components are listed: 2,2,4-Trimethylpentane; Ethylbenzene; o-Xylene; Benzene; Toluene

**New Jersey**

The following components are listed: ISOOCTANE; 2,2,4-TRIMETHYLPENTANE; PENTANE, 2,2,4-TRIMETHYL-; METHYL N-BUTYL KETONE; 2-HEXANONE; ETHYL BENZENE; BENZENE, ETHYL-; o-XYLENE; BENZENE, 1,2-DIMETHYL-; BENZENE; TOLUENE; TOLUOL; BENZENE, METHYL-; PHENYL METHANE; METHYL BENZENE

**Pennsylvania**

The following components are listed: PENTANE, 2,2,4-TRIMETHYL-; 2-HEXANONE; BENZENE, ETHYL-; BENZENE, 1,2-DIMETHYL-; BENZENE; BENZOL DILUENT; BENZENE, METHYL-

### California Prop. 65

**WARNING:** This product can expose you to chemicals including Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Ethylbenzene, which is known to the State of California to cause cancer, and Methyl n-butyl ketone and Toluene, 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.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
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</thead>
<tbody>
<tr>
<td>Methyl n-butyl ketone</td>
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<td>-</td>
</tr>
<tr>
<td>Ethylbenzene</td>
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<td>-</td>
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<tr>
<td>Benzene</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Toluene</td>
<td>-</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### International regulations

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

Date of issue: 11/02/2021
Section 15. Regulatory information

Inventory list

- **Australia**: All components are listed or exempted.
- **Canada**: All components are listed or exempted.
- **China**: All components are listed or exempted.
- **Europe**: All components are listed or exempted.
- **Japan**: Japan inventory (CSCL): All components are listed or exempted. Japan inventory (ISHL): All components are listed or exempted.
- **New Zealand**: All components are listed or exempted.
- **Philippines**: All components are listed or exempted.
- **Republic of Korea**: All components are listed or exempted.
- **Taiwan**: All components are listed or exempted.
- **Thailand**: Not determined.
- **Turkey**: Not determined.
- **United States**: All components are active or exempted.
- **Viet Nam**: All components are listed or exempted.

Section 16. Other information

### Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABLE LIQUIDS - Category 2</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>SKIN IRRITATION - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>EYE IRRITATION - Category 2A</td>
<td>Calculation method</td>
</tr>
<tr>
<td>GERM CELL MUTAGENICITY - Category 1</td>
<td>Calculation method</td>
</tr>
<tr>
<td>CARCINOGENICITY - Category 1A</td>
<td>Calculation method</td>
</tr>
<tr>
<td>TOXIC TO REPRODUCTION - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</td>
<td>Calculation method</td>
</tr>
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<td>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1</td>
<td>Calculation method</td>
</tr>
<tr>
<td>ASPIRATION HAZARD - Category 1</td>
<td>Expert judgment</td>
</tr>
<tr>
<td>AQUATIC HAZARD (ACUTE) - Category 1</td>
<td>Calculation method</td>
</tr>
<tr>
<td>AQUATIC HAZARD (LONG-TERM) - Category 1</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

### History

- **Date of issue**: 11/02/2021
- **Date of previous issue**: 02/26/2014
- **Version**: 3

### 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
- **MARPOL** = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- **N/A** = Not available
- **UN** = United Nations

*Indicates information that has changed from previously issued version.*

Notice to reader

- **Date of issue**: 11/02/2021
Section 16. Other information

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