Section 1. Identification

GHS product identifier : Epoxy Coating Anti-Static 10P2-3
Other means of identification : 10P2-3_Epoxy Coating Anti-Static

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against : FOR INDUSTRIAL USE ONLY

Supplier/Manufacturer : Akzo Nobel Coatings, Inc.
1 East Water Street
Waukegan, IL 60085
USA
Tel. 1 847 623 4200
Email: customer.service@akzonobel.com

Canadian Supplier : Akzo Nobel Coatings Ltd.
110 Woodbine Downs Blvd.
Unit #4 Etobicoke, Ontario
Canada M9W 5S6
+1 (800) 618-1010

Emergency telephone number : CHEMTREC +1 (800) 424-9300 (Inside the US)
CHEMTREC International +1 (703) 527-3887 (Outside the US, collect calls accepted)

Date of issue / Date of revision : 2 December 2015
Version : 7
Date of printing : 2 December 2015

Akzo Nobel Coatings Inc. encourages and expects you to read and understand this entire MSDS, as there is important information throughout the document. Further, Akzo Nobel Coatings Inc. expects you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

To promote safe handling, each customer or recipient should: 1) Notify its employees, agents, contractors, and others whom it knows or believes will use this material of the information contained in this MSDS and any other information regarding hazards and safety; 2) Furnish this same information to each of its customers for the product; 3) Request its customers to notify their employees, customers, and other users of the product of this information; and 4) Notify its employees, agents, contractors, and others that the precautions identified for this product and any other products with which mixtures may be created are transferable and cumulative to the mixture.

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
## Section 2. Hazards identification

| Classification of the substance or mixture | FLAMMABLE LIQUIDS - Category 2  
|                                          | ACUTE TOXICITY (oral) - Category 5  
|                                          | ACUTE TOXICITY (dermal) - Category 5  
|                                          | ACUTE TOXICITY (inhalation) - Category 4  
|                                          | SKIN CORROSION/IRRITATION - Category 2  
|                                          | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
|                                          | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
|                                          | AQUATIC HAZARD (ACUTE) - Category 1  
|                                          | AQUATIC HAZARD (LONG-TERM) - Category 1  
| Percentage of the mixture consisting of ingredient(s) of unknown toxicity: | 27.3%  
| Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: | 17.9%  

### GHS label elements

| Hazard pictograms | ![Flammable](image1) ![Skin Irrit](image2) ![Exclamation](image3) ![Aquatic](image4)  
|                   |  

| Signal word | Danger  
|             |  

### Hazard statements

- Highly flammable liquid and vapor.  
- Harmful if inhaled.  
- May be harmful if swallowed or in contact with skin.  
- Causes serious eye damage.  
- Causes skin irritation.  
- May cause drowsiness or dizziness.  
- Very toxic to aquatic life with long lasting effects.  

### Precautionary statements

#### Prevention

- Wear protective gloves. Wear eye or face protection.  
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area.  
- Avoid release to the environment. Avoid breathing vapor.  
- Wash hands thoroughly after handling.  

#### Response

- Collect spillage.  
- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.  
- IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. 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. Immediately call a POISON CENTER or physician.  

#### Storage

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

#### Disposal

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

### Other hazards which do not result in classification

- None known.
Section 3. Composition/information on ingredients

Substance/mixture: Mixture

Hazardous ingredients

<table>
<thead>
<tr>
<th>Ingredient name / Chemical name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>butanone</td>
<td>25 - 50</td>
<td>78-93-3</td>
</tr>
<tr>
<td>xylene</td>
<td>10 - 25</td>
<td>1330-20-7</td>
</tr>
<tr>
<td>trizinc bis(orthophosphate)</td>
<td>2.5 - 10</td>
<td>7779-90-0</td>
</tr>
<tr>
<td>carbon black, respirable powder</td>
<td>2.5 - 10</td>
<td>1333-86-4</td>
</tr>
<tr>
<td>4-methylpentan-2-one</td>
<td>2.5 - 10</td>
<td>108-10-1</td>
</tr>
<tr>
<td>cyclohexanone</td>
<td>2.5 - 10</td>
<td>108-94-1</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>2.5 - 10</td>
<td>100-41-4</td>
</tr>
<tr>
<td>toluene</td>
<td>2.5 - 10</td>
<td>108-88-3</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>1 - 2.5</td>
<td>71-36-3</td>
</tr>
</tbody>
</table>

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Inhalation: Get medical attention immediately. Call a poison center or physician. 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. 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: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. 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

For additional information call Akzo Nobel at (847) 625-4200
To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
Section 4. First aid measures

Potential acute health effects

Eye contact: Causes serious eye damage.
Inhalation: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
Skin contact: May be harmful in contact with skin. Causes skin irritation.
Ingestion: May be harmful if swallowed. Can cause central nervous system (CNS) depression. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:
- pain
- watering
- redness
Inhalation: Adverse symptoms may include the following:
- headache
- drowsiness/fatigue
- dizziness/vertigo
- unconsciousness
Skin contact: Adverse symptoms may include the following:
- pain or irritation
- redness
- blistering may occur
Ingestion: Adverse symptoms may include the following:
- stomach pains

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. 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.
Section 5. Fire-fighting measures

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. 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
- phosphorus oxides
- metal oxide/oxides

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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised 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. Collect spillage.

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 additional information call Akzo Nobel at (847) 625-4200 To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
Section 6. Accidental release measures
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). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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. 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>
<tbody>
<tr>
<td>butanone</td>
<td>ACGIH TLV (United States, 3/2015).</td>
</tr>
<tr>
<td></td>
<td>STEL: 885 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEL: 300 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 590 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 200 ppm 8 hours.</td>
</tr>
<tr>
<td>xylene</td>
<td>ACGIH TLV (United States, 3/2015).</td>
</tr>
<tr>
<td></td>
<td>STEL: 651 mg/m³ 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>STEL: 150 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 434 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 100 ppm 8 hours.</td>
</tr>
<tr>
<td>carbon black, respirable powder</td>
<td>ACGIH TLV (United States, 3/2015).</td>
</tr>
<tr>
<td></td>
<td>TWA: 3 mg/m³ 8 hours. Form: Inhalable fraction</td>
</tr>
<tr>
<td>4-methylpentan-2-one</td>
<td>ACGIH TLV (United States, 3/2015).</td>
</tr>
<tr>
<td></td>
<td>STEL: 75 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 20 ppm 8 hours.</td>
</tr>
</tbody>
</table>

For additional information call Akzo Nobel at (847) 625-4200
To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
**Section 8. Exposure controls/personal protection**

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH TLV (United States, 3/2015).</th>
</tr>
</thead>
<tbody>
<tr>
<td>cyclohexanone</td>
<td>Absorbed through skin. STEL: 50 ppm 15 minutes. TWA: 20 ppm 8 hours.</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td></td>
</tr>
<tr>
<td>toluene</td>
<td></td>
</tr>
<tr>
<td>butan-1-ol</td>
<td></td>
</tr>
</tbody>
</table>

**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.

**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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

**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.

For additional information call Akzo Nobel at (847) 625-4200
To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
Section 8. Exposure controls/personal protection

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

Section 9. Physical and chemical properties

Appearance

Physical state: Liquid.
Color: Black.
Odor: Solvent.
Odor threshold: Not available.
pH: Not available.
Melting/freezing point: Not available.
Boiling point: 80°C (176°F)
Boiling range: Not available.
Flash point: Closed cup: -4°C (24.8°F)
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Upper/lower flammability or explosive limits
Upper: Not determined.
Lower: Not determined.

Vapor pressure: Not available.
Vapor density: Not available.
Relative density: 0.992
Density: 8.28 lbs/gal 0.992 g/cm³
Solubility: Not available.
Solubility in water: Not available.
Partition coefficient: n-octanol/water: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Viscosity: Kinematic (room temperature): 5.54 cm²/s (554 cSt)
Weight Volatiles: 66.25% (w/w)
Volume Volatiles: 78.91 %(v/v)
Weight Solids: 33.75 %(w/w)
Volume Solids: 21.09 %(v/v)
Regulatory VOC: 5.48 lbs/gal (657 g/l) minus water and exempt solvents

For additional information call Akzo Nobel at (847) 625-4200
To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
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>LD50 Dermal</th>
<th>LD50 Oral</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>butanone</td>
<td></td>
<td></td>
<td>Rabbit</td>
<td>6480 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>xylene</td>
<td></td>
<td></td>
<td>Rabbit</td>
<td>2737 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>carbon black, respirable powder</td>
<td></td>
<td></td>
<td>Rat</td>
<td>4300 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4-methylpentan-2-one</td>
<td></td>
<td></td>
<td>Rat</td>
<td>&gt;15400 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>cyclohexanone</td>
<td></td>
<td></td>
<td>Rat</td>
<td>2080 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>ethylbenzene</td>
<td></td>
<td></td>
<td>Rat</td>
<td>1800 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>toluene</td>
<td></td>
<td></td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>butan-1-ol</td>
<td></td>
<td></td>
<td>Rat</td>
<td>3500 mg/kg</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<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>butanone</td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 14 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>xylene</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rat</td>
<td>-</td>
<td>8 hours 60 microliters</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>4-methylpentan-2-one</td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 Percent</td>
<td>-</td>
</tr>
</tbody>
</table>

For additional information call Akzo Nobel at (847) 625-4200
To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
**Section 11. Toxicological information**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Eyes - Severe irritant</th>
<th>Skin - Mild irritant</th>
<th>Skin - Moderate irritant</th>
</tr>
</thead>
<tbody>
<tr>
<td>cyclohexanone</td>
<td>Rabbit</td>
<td>- microliters</td>
<td>- 40 milligrams</td>
</tr>
<tr>
<td></td>
<td>- 40 milligrams</td>
<td>- 24 hours 500</td>
<td>- 20 milligrams</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Rabbit</td>
<td>- 600 milligrams</td>
<td>- 24 hours 50</td>
</tr>
<tr>
<td></td>
<td>- 500 milligrams</td>
<td>- 48 hours 50</td>
<td>- 20 milligrams</td>
</tr>
<tr>
<td>toluene</td>
<td>Rabbit</td>
<td>- 250 micrograms</td>
<td>- 500 micrograms</td>
</tr>
<tr>
<td></td>
<td>- 100 micrograms</td>
<td>- 24 hours 15</td>
<td>- 500 micrograms</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>Rabbit</td>
<td>- 1500 micrograms</td>
<td>- 24 hours 250</td>
</tr>
<tr>
<td></td>
<td>- 100 micrograms</td>
<td>- 24 hours 20</td>
<td>- 20 milligrams</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sensitization**
Not available.

**Mutagenicity**
Not available.

**Carcinogenicity**
Not available.

**Reproductive toxicity**
Not available.

**Teratogenicity**
Not available.

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

For additional information call Akzo Nobel at (847) 625-4200
To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>butanone</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Narcotic effects</td>
</tr>
<tr>
<td>4-methylpentan-2-one</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>toluene</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Narcotic effects</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation and Narcotic effects</td>
</tr>
</tbody>
</table>

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>ethylbenzene</td>
<td>Category 2</td>
<td>Inhalation</td>
<td>Not determined</td>
</tr>
<tr>
<td>toluene</td>
<td>Category 2</td>
<td>Inhalation</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Aspiration hazard

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

Information on the likely routes of exposure

Potential acute health effects

Eye contact: Causes serious eye damage.

Inhalation: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Skin contact: May be harmful in contact with skin. Causes skin irritation.

Ingestion: May be harmful if swallowed. Can cause central nervous system (CNS) depression. May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:
  - pain
  - watering
  - redness

Inhalation: Adverse symptoms may include the following:
  - nausea or vomiting
  - headache
  - drowsiness/fatigue
  - dizziness/vertigo
  - unconsciousness

Skin contact: Adverse symptoms may include the following:
  - pain or irritation
  - redness
  - blistering may occur

For additional information call Akzo Nobel at (847) 625-4200
To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
Section 11. Toxicological information

Ingestion:
Adverse symptoms may include the following: stomach pains

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

Not available.

General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
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>2576.6 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>3751.7 mg/kg</td>
</tr>
<tr>
<td>Inhalation (gases)</td>
<td>16731.8 ppm</td>
</tr>
<tr>
<td>Inhalation (vapors)</td>
<td>27.18 mg/l</td>
</tr>
<tr>
<td>Inhalation (dusts and mists)</td>
<td>5.577 mg/l</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>butanone</td>
<td>Acute EC50 &gt;500000 µg/l Marine water</td>
<td>Algae - Skeletonema costatum</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 5091000 to 6440000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna Larvae</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 5600 ppm Fresh water</td>
<td>Fish - Gambusia affinis Adult</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 8500 µg/l Marine water</td>
<td>Crustaceans - Palaemonetes pugio</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 13400 µg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 0.04 mg/l</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute IC50 0.136 mg/l</td>
<td>Algae - Selenastrum</td>
<td>72 hours</td>
</tr>
</tbody>
</table>

For additional information call Akzo Nobel at (847) 625-4200
To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
## Section 12. Ecological information

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Acute LC50/EC50</th>
<th>Chronic NOEC</th>
<th>Species/Exposure</th>
<th>Toxicity Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>carbon black, respirable powder</td>
<td>Acute LC50 0.021 mg/l</td>
<td></td>
<td>capricornutum Fish - Lepomis Macrochirus</td>
<td>96 hours</td>
</tr>
<tr>
<td>4-methylpentan-2-one</td>
<td>Acute LC50 0.05 mg/l</td>
<td>Chronic NOEC 78 mg/l</td>
<td>Oncorhynchus Mykiss Fish - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td>cyclohexanone</td>
<td>Acute EC50 37.563 mg/l Fresh water</td>
<td>Chronic NOEC 168 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>Acute LC50 505000 to 514000 µg/l Fresh water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>toluene</td>
<td>Acute EC50 32.9 mg/l Fresh water</td>
<td>Chronic NOEC 78 mg/l</td>
<td>Daphnia magna - Neonate Fish - Pimephales promelas - Embryo</td>
<td>21 days</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>Acute LC50 3.56 mg/l Fresh water</td>
<td>Chronic NOEC 168 mg/l</td>
<td>Daphnia magna - Neonate Fish - Pimephales promelas - Embryo</td>
<td>33 days</td>
</tr>
</tbody>
</table>

### Persistence and degradability
Not available.

### Bioaccumulative potential
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>butanone</td>
<td>0.3</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>xylene</td>
<td>3.12</td>
<td>8.1 to 25.9</td>
<td>low</td>
</tr>
<tr>
<td>trizinc bis(orthophosphate)</td>
<td>-</td>
<td>60960</td>
<td>high</td>
</tr>
<tr>
<td>4-methylpentan-2-one</td>
<td>1.9</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>cyclohexanone</td>
<td>0.86</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>3.6</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>toluene</td>
<td>2.73</td>
<td>90</td>
<td>low</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>1</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

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

Other adverse effects: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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.

Section 14. Transport information

Special precautions for user: The actual shipping description for this product may vary based several factors including, but not limited to, the volume of material, size of the container, mode of transport and use of exemptions or exceptions found in the applicable regulations. The information provided in Section 14 is one possible shipping description for this product. Consult your shipping specialist or supplier for appropriate assignment of the DOT information.

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 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>UN1263</td>
<td>UN1263</td>
<td>UN1263</td>
<td>UN1263</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>PAINT</td>
<td>PAINT</td>
<td>PAINT</td>
<td>PAINT</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

| Packing group | II | II | II | II | II |
| Environmental hazards | Yes. | No. | No. | Yes. | No. |

Section 15. Regulatory information

U.S. Federal regulations

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

SARA 311/312

Classification:
- Fire hazard
- Immediate (acute) health hazard
- Delayed (chronic) health hazard

SARA 313

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>15 - 20</td>
</tr>
<tr>
<td>trizinc bis(orthophosphate)</td>
<td>7779-90-0</td>
<td>5 - 10</td>
</tr>
<tr>
<td>4-methylpentan-2-one</td>
<td>108-10-1</td>
<td>5 - 10</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>1 - 5</td>
</tr>
<tr>
<td>toluene</td>
<td>108-88-3</td>
<td>1 - 5</td>
</tr>
<tr>
<td>butan-1-ol</td>
<td>71-36-3</td>
<td>1 - 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.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

International lists

For additional information call Akzo Nobel at (847) 625-4200
To request an updated SDS please visit http://www.formstack.com/forms/AkzoNobel-document_request_form
Section 15. Regulatory information

National inventory

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: At least one component is not listed.
Malaysia: At least one component is not listed.
New Zealand: All components are listed or exempted.
Philippines: At least one component is not listed.
Republic of Korea: All components are listed or exempted.
Taiwan: All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response. Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

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 number 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: 2 December 2015
Version: 7
Section 16. Other information

MSDS #: 002987
0005

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

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.