SAFETY DATA SHEET

Section 1. Identification

Product identifier : 9520
Product name : Permacron 9520 Raderal Hardener Catalyst
Date of issue : 2/18/2020
Version : 1.01

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

Identified uses : Coating component for professional use.
Uses advised against : For industrial use only by trained professionals. Not for sale to or use by consumers.

Supplier's details
Axalta Coating Systems, LLC
Two Commerce Square, 2001 Market Street Suite 3600 Philadelphia, PA 19109 USA

Product information : 855-6AXALTA

Emergency telephone number : (CHEMTREC) - 800-424-9300

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 ORGANIC PEROXIDES - Type E SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 15%
Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 42%

GHS label elements
Hazard pictograms :  

Signal word : Danger
Section 2. Hazards identification

Hazard statements:
- H225 - Highly flammable liquid and vapor.
- H242 - Heating may cause a fire.
- H314 - Causes severe skin burns and eye damage.
- H335 - May cause respiratory irritation.
- H336 - May cause drowsiness or dizziness.

Precautionary statements

Prevention:
- P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
- P242 - Use only non-sparking tools.
- P243 - Take precautionary measures against static discharge.
- P220 - Keep away from clothing, incompatible materials and combustible materials.
- P234 - Keep only in original container.
- P233 - Keep container tightly closed.
- P271 - Use only outdoors or in a well-ventilated area.
- P261 - Avoid breathing vapor.
- P264 - Wash hands thoroughly after handling.

Response:
- P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician.
- P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353 + P363 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician.
- P305 + P351 + P338 + P310 - 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:
- P405 - Store locked up.
- P410 - Protect from sunlight.
- P411 - Store at temperatures not exceeding 25 °C/77 °F.
- P403 - Store in a well-ventilated place.
- P235 - Keep cool.
- P420 - Store away from other materials.

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

Hazards not otherwise classified:
None known.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl acetate</td>
<td>≥25 - ≤50</td>
<td>141-78-6</td>
</tr>
<tr>
<td>4-hydroxy-4-methylpentan-2-one</td>
<td>≥25 - ≤33</td>
<td>123-42-2</td>
</tr>
<tr>
<td>cyclohexanone, peroxide</td>
<td>≥10 - ≤18</td>
<td>12262-58-7</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**
- 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

**Potential acute health effects**

**Eye contact**
- Causes serious eye damage.

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

**Skin contact**
- Causes severe burns.

**Ingestion**
- Can cause central nervous system (CNS) depression.

**Over-exposure signs/symptoms**

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

**Inhalation**
- Adverse symptoms may include the following:
  - respiratory tract irritation
  - coughing
  - nausea or vomiting
  - headache
  - drowsiness/fatigue
  - dizziness/vertigo
  - unconsciousness
Section 4. First aid measures

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.

Specific treatments: No specific treatment.

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

Ingestion:
- Adverse symptoms may include the following:
  - stomach pains

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.

Specific treatments:
- No specific treatment.

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. Runoff to sewer may create fire or explosion hazard. This material increases the risk of fire and may aid combustion. Heating may cause a fire. May re-ignite itself after fire is extinguished. Hazardous decomposition may occur. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

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

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

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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. Avoid contamination with reactive substances. Dilute with water and mop up if water-soluble. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. 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. Avoid contamination with reactive substances. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. 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). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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. Keep away from clothing, incompatible materials and combustible materials. Temperature control may be required. 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.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities: To avoid the risk of formation of shock-sensitive crystals or loss of stability, it is important to store the product within the recommended temperature range. Temperature control may be required. 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 at temperatures not exceeding 25 °C/77 °F. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Separate from reducing agents and combustible materials. Keep away from rust, iron and copper. Keep container tightly closed and sealed until ready for use. Prevent product contamination. 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.

Storage code: IB

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name | Exposure limits
--- | ---
ethyl acetate | ACGIH TLV (United States, 3/2018).
 | TWA: 400 ppm 8 hours.
 | TWA: 1440 mg/m³ 8 hours.
 | TWA: 400 ppm 8 hours.
 | TWA: 1400 mg/m³ 8 hours.
 | NIOSH REL (United States, 10/2016).
 | TWA: 400 ppm 10 hours.
 | TWA: 1400 mg/m³ 10 hours.
 | OSHA PEL (United States, 5/2018).
 | TWA: 400 ppm 8 hours.
 | TWA: 1400 mg/m³ 8 hours.

4-hydroxy-4-methylpentan-2-one | ACGIH TLV (United States, 3/2018).
 | TWA: 50 ppm 8 hours.
 | TWA: 238 mg/m³ 8 hours.
 | TWA: 50 ppm 8 hours.
 | TWA: 240 mg/m³ 8 hours.
 | NIOSH REL (United States, 10/2016).
 | TWA: 50 ppm 10 hours.
 | TWA: 240 mg/m³ 10 hours.
 | OSHA PEL (United States, 5/2018).
 | TWA: 50 ppm 8 hours.
 | TWA: 240 mg/m³ 8 hours.

cyclohexanone, peroxide | None.

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. Use with adequate ventilation.
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 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.

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

Section 9. Physical and chemical properties

Appearance

Physical state: Liquid.
Color: Clear.
Odor: Not available.
Odor threshold: Not available.
PH: Not applicable.
Melting point: Not applicable.
Boiling point: Not applicable.
Flash point: Closed cup: 8°C (46.4°F)
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower and upper explosive limits</td>
<td>Lower: 1.4%</td>
</tr>
<tr>
<td></td>
<td>Upper: 11.4%</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>13.3 kPa (100 mm Hg) [room temperature]</td>
</tr>
<tr>
<td>Vapor density</td>
<td>3 [Air = 1]</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.02 g/cm³</td>
</tr>
<tr>
<td>Solubility</td>
<td>Very slightly soluble in the following materials: cold water.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>380°C (716°F)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Dynamic (room temperature): 18 mPa·s (18 cP)</td>
</tr>
<tr>
<td></td>
<td>Kinematic (room temperature): 0.18 cm²/s (18 cSt)</td>
</tr>
<tr>
<td>Flow time (ISO 2431)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>This product, in laboratory testing, neither detonates nor deflagrates and only shows low or no effect when heated under confinement.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: temperature increase high temperature Reactions may include the following: hazardous decomposition risk of causing fire</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>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. Avoid increased storage temperature. Do not allow vapor to accumulate in low or confined areas. Drying on clothing or other combustible materials may cause fire.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Reactive or incompatible with the following materials: oxidizing materials combustible materials reducing materials copper iron rust</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity
Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl acetate</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>22.6 mg/l</td>
<td>4 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>20001 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>5620 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4-hydroxy-4-methylpentan-2-one</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>13500 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2520 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>4-hydroxy-4-methylpentan-2-one</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>20 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>20 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 microliters</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)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl acetate</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Narcotic effects</td>
</tr>
<tr>
<td>4-hydroxy-4-methylpentan-2-one</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**
Not available.

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

**Potential acute health effects**

**Eye contact**
Causes serious eye damage.
Section 11. Toxicological information

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

Skin contact: Causes severe burns.

Ingestion: Can cause central nervous system (CNS) depression.

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:
- respiratory tract irritation
- coughing
- nausea or vomiting
- 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

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

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Potential chronic health effects

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>2456.14 mg/kg</td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

Section 12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses waterways.

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

<table>
<thead>
<tr>
<th></th>
<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>UN3107</td>
<td>UN3107</td>
<td>UN3107</td>
<td>UN3107</td>
<td>UN3107</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Organic peroxide type E, liquid (cyclohexanone, peroxide)</td>
<td>ORGANIC PEROXIDE TYPE E, LIQUID (cyclohexanone, peroxide)</td>
<td>PEROXIDO ORGANICO LIQUIDO TIPO E (cyclohexanone, peroxide)</td>
<td>ORGANIC PEROXIDE TYPE E, LIQUID (cyclohexanone, peroxide)</td>
<td>Organic peroxide type E, liquid (cyclohexanone, peroxide)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>5.2</td>
<td>5.2</td>
<td>5.2</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Packing group</td>
<td>-</td>
<td>II</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Additional information: Limited quantity Yes.

Quantity limitation: Passenger aircraft/rail: 10 L. Cargo aircraft: 25 L.
Section 14. Transport information

<table>
<thead>
<tr>
<th>TDG Classification</th>
<th>Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.23-2.25 (Class 5).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Explosive Limit and Limited Quantity Index</strong> 0.125</td>
</tr>
<tr>
<td></td>
<td><strong>Passenger Carrying Vessel Index</strong> Forbidden</td>
</tr>
<tr>
<td></td>
<td><strong>Passenger Carrying Road or Rail Index</strong> 10</td>
</tr>
<tr>
<td></td>
<td><strong>Special provisions</strong> 16, 38</td>
</tr>
<tr>
<td>Mexico Classification</td>
<td><strong>Special provisions</strong> 122, 274</td>
</tr>
<tr>
<td>IMDG</td>
<td><strong>Emergency schedules</strong> F-J, S-R</td>
</tr>
<tr>
<td></td>
<td><strong>Special provisions</strong> 122, 274</td>
</tr>
<tr>
<td>IATA</td>
<td><strong>Quantity limitation</strong> Passenger and Cargo Aircraft: 10 L. Packaging instructions: 570.</td>
</tr>
<tr>
<td></td>
<td><strong>Packaging instructions:</strong> Forbidden.</td>
</tr>
<tr>
<td></td>
<td><strong>Special provisions</strong> A20, A150, A802</td>
</tr>
</tbody>
</table>

**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 Annex II of MARPOL and the IBC Code

Not available.

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 information.

Section 15. Regulatory information

**Clean Air Act Section 112** (b) Hazardous Air Pollutants (HAPs)

SARA 304 RQ

SARA 304 RQ : Not applicable.

SARA 311/312 Classification : FLAMMABLE LIQUIDS - Category 2

ORGANIC PEROXIDES - Type E

SKIN CORROSION - Category 1B

SERIOUS EYE DAMAGE - Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

**SARA 313**

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form R - Reporting requirements</td>
<td>dimethyl phthalate</td>
<td>131-11-3</td>
</tr>
<tr>
<td>Supplier notification</td>
<td>dimethyl phthalate</td>
<td>131-11-3</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.

Inventory list

Date of issue : 2/18/2020

Version : 1.01
Section 15. Regulatory information

Canada: All components are listed or exempted.
United States: All components are listed or exempted.

Section 16. Other information

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

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ 3</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

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 and the associated label are not required on SDSs or products leaving a facility 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 trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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 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: 2/18/2020
Version: 1.01

Product stewardship and regulatory compliance.

Key to abbreviations:

ATE = Acute Toxicity Estimate
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

Indicates information that has changed from previously issued version.

Notice to reader

This product is intended for industrial use only.

Safety Data Sheet (SDS) content is believed to be accurate as of its issue date, but is subject to change as new information is received by Axalta Coatings Systems, LLC or any of its subsidiaries or affiliates (Axalta). This SDS may incorporate information that has been provided to Axalta by its suppliers. Users should ensure that they are referring to the most current version of the SDS. Users are responsible for following the precautions identified in this SDS. It is the users' responsibility to comply with all laws and regulations applicable to the safe handling, use, and disposal of the product.
Section 16. Other information

Users of Axalta products should read all relevant product information prior to use, and make their own determination as to the suitability of the products for their intended use. Except as otherwise required by applicable law, AXALTA MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The information on this SDS relates only to the specific product identified in Section 1, Identification, and does not relate to its possible use in combination with any other material or in any specific process. If this product is to be used in combination with other products, Axalta encourages you to read and understand the SDS for all products prior to use.

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