# SAFETY DATA SHEET

531-0-006

## Section 1. Identification

**Product name** : MEK Peroxide Catalyst
Red

**Product code** : 531-0-006

**Other means of identification** : Not available.

**Product type** : Liquid.

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

Paint or paint related material.

**Manufacturer** : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

**Emergency telephone number of the company** : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

**Product Information Telephone Number** : US / Canada: (800) 524-5979
Mexico: Not Available

**Regulatory Information Telephone Number** : US / Canada: (216) 566-2902
Mexico: Not Available

**Transportation Emergency Telephone Number** : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

## 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 4
ORGANIC PEROXIDES - Type D
ACUTE TOXICITY (inhalation) - Category 3
SKIN CORROSION/IRRITATION - Category 1B
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 35%

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger

## Section 2. Hazards identification

**Hazard statements** : Combustible liquid.
Heating may cause a fire.
Causes severe skin burns and eye damage.
Toxic if inhaled.
May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

**Prevention** : Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Keep only in original packaging. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash thoroughly after handling.

**Response** : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. 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 doctor.

**Storage** : Store locked up. Protect from sunlight. Store at temperatures not exceeding 25 °C/77 °F. Store in a well-ventilated place. Keep cool. Store separately.

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

**Supplemental label elements**

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

**CAS number/other identifiers**

| Ingredient name | % by weight | CAS number |
|---|---|---|
| Dimethyl Phthalate | ≥25 - ≤50 | 131-11-3 |
| Methyl Ethyl Ketone Peroxide | ≥25 - ≤35 | 1338-23-4 |
| Methyl Ethyl Ketone | ≤2.7 | 78-93-3 |
| Hydrogen Peroxide | ≤1 | 7722-84-1 |

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

## 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. 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** : Toxic if inhaled.

**Skin contact** : Causes severe burns.

**Ingestion** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

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

**Inhalation** : No specific data.

**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.

## Section 4. First aid measures

**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, $CO_2$, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : Combustible liquid. 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.

**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**

## Section 6. Accidental release measures

**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. 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.

**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.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits (OSHA United States)

| Ingredient name | CAS # | Exposure limits |
|---|---|---|
| Dimethyl Phthalate | 131-11-3 | **ACGIH TLV (United States, 1/2023).**<br>TWA: 5 mg/m³ 8 hours.<br>**NIOSH REL (United States, 10/2020).**<br>TWA: 5 mg/m³ 10 hours.<br>**OSHA PEL (United States, 5/2018).**<br>TWA: 5 mg/m³ 8 hours. |
| Methyl Ethyl Ketone Peroxide | 1338-23-4 | **ACGIH TLV (United States, 1/2023).**<br>C: 0.2 ppm<br>C: 1.5 mg/m³<br>**NIOSH REL (United States, 10/2020).**<br>CEIL: 0.2 ppm<br>CEIL: 1.5 mg/m³ |
| Methyl Ethyl Ketone | 78-93-3 | **ACGIH TLV (United States, 1/2023).**<br>TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m³ 8 hours.<br>STEL: 300 ppm 15 minutes.<br>STEL: 885 mg/m³ 15 minutes.<br>**NIOSH REL (United States, 10/2020).**<br>TWA: 200 ppm 10 hours.<br>TWA: 590 mg/m³ 10 hours.<br>STEL: 300 ppm 15 minutes.<br>STEL: 885 mg/m³ 15 minutes.<br>**OSHA PEL (United States, 5/2018).**<br>TWA: 200 ppm 8 hours.<br>TWA: 590 mg/m³ 8 hours. |
| Hydrogen Peroxide | 7722-84-1 | **ACGIH TLV (United States, 1/2023).**<br>TWA: 1 ppm 8 hours.<br>TWA: 1.4 mg/m³ 8 hours.<br>**NIOSH REL (United States, 10/2020).**<br>TWA: 1 ppm 10 hours.<br>TWA: 1.4 mg/m³ 10 hours.<br>**OSHA PEL (United States, 5/2018).**<br>TWA: 1 ppm 8 hours.<br>TWA: 1.4 mg/m³ 8 hours. |

### Occupational exposure limits (Canada)

| Ingredient name | CAS # | Exposure limits |
|---|---|---|
| Methyl ethyl ketone peroxide | 1338-23-4 | **CA Alberta Provincial (Canada, 6/2018).**<br>C: 1.4 mg/m³<br>C: 0.2 ppm<br>**CA British Columbia Provincial (Canada, 6/2022).**<br>C: 0.2 ppm<br>**CA Ontario Provincial (Canada, 6/2019).**<br>Ceiling Limit: 0.2 ppm<br>**CA Quebec Provincial (Canada, 6/2022).**<br>STEV: 0.2 ppm 15 minutes.<br>STEV: 1.5 mg/m³ 15 minutes.<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>CEIL: 0.2 ppm |

| | | |
|---|---|---|
| Methyl ethyl ketone | 78-93-3 | **CA Alberta Provincial (Canada, 6/2018).**<br>15 min OEL: 300 ppm 15 minutes.<br>8 hrs OEL: 200 ppm 8 hours.<br>8 hrs OEL: 590 mg/m³ 8 hours.<br>15 min OEL: 885 mg/m³ 15 minutes.<br>**CA British Columbia Provincial (Canada, 6/2022).**<br>TWA: 50 ppm 8 hours.<br>STEL: 100 ppm 15 minutes.<br>**CA Ontario Provincial (Canada, 6/2019).**<br>TWA: 200 ppm 8 hours.<br>STEL: 300 ppm 15 minutes.<br>**CA Quebec Provincial (Canada, 6/2022).**<br>TWAEV: 50 ppm 8 hours.<br>TWAEV: 150 mg/m³ 8 hours.<br>STEV: 100 ppm 15 minutes.<br>STEV: 300 mg/m³ 15 minutes.<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>STEL: 300 ppm 15 minutes.<br>TWA: 200 ppm 8 hours. |
| Hydrogen peroxide | 7722-84-1 | **CA Alberta Provincial (Canada, 6/2018).**<br>8 hrs OEL: 1 ppm 8 hours.<br>8 hrs OEL: 1.4 mg/m³ 8 hours.<br>**CA British Columbia Provincial (Canada, 6/2022).**<br>TWA: 1 ppm 8 hours.<br>**CA Ontario Provincial (Canada, 6/2019).**<br>TWA: 1 ppm 8 hours.<br>**CA Quebec Provincial (Canada, 6/2022).**<br>TWAEV: 1 ppm 8 hours.<br>**CA Saskatchewan Provincial (Canada, 7/2013).**<br>STEL: 2 ppm 15 minutes.<br>TWA: 1 ppm 8 hours. |

**Occupational exposure limits (Mexico)**

| | CAS # | Exposure limits |
|---|---|---|
| Methyl Ethyl Ketone Peroxide | 1338-23-4 | **NOM-010-STPS-2014 (Mexico, 4/2016).**<br>CEIL: 0.2 ppm |
| Methyl Ethyl Ketone | 78-93-3 | **NOM-010-STPS-2014 (Mexico, 4/2016).**<br>TWA: 200 ppm 8 hours.<br>STEL: 300 ppm 15 minutes. |
| Hydrogen Peroxide | 7722-84-1 | **NOM-010-STPS-2014 (Mexico, 4/2016).**<br>TWA: 1 ppm 8 hours. |

**Biological exposure indices (United States)**

| Ingredient name | Exposure indices |
|---|---|
| Methyl Ethyl Ketone | **ACGIH BEI (United States, 1/2023)**<br>BEI: 2 mg/l, methyl ethyl ketone [in urine].<br>Sampling time: end of shift. |

**Biological exposure indices (Canada)**

No exposure indices known.

**Biological exposure indices (Mexico)**

# Section 8. Exposure controls/personal protection

| Ingredient name | Exposure indices |
| --- | --- |
| Methyl Ethyl Ketone | **Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012)** BEI: 2 mg/L, MEK [in urine]. Sampling time: at the end of the work shift. |

**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.

**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.

**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

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

**Appearance**

**Physical state** : Liquid.

**Color** : Red.

**Odor** : Not available.

**Odor threshold** : Not available.

**pH** : Not applicable.

**Melting point/freezing point** : Not available.

**Boiling point, initial boiling point, and boiling range** : 78°C (172.4°F)

**Flash point** : Closed cup: 86°C (186.8°F) [Setaflash Closed Cup]

**Evaporation rate** : 5.6 (butyl acetate = 1)

**Flammability** : Not available.

**Lower and upper explosion limit/flammability limit** : Lower: 0.94%
Upper: 10%

**Vapor pressure** : 12.1 kPa (90.6 mm Hg)

**Relative vapor density** : 1 [Air = 1]

**Relative density** : 1.09

**Solubility(ies)** :

| Media | Result |
|---|---|
| cold water | Not soluble |

**Partition coefficient: n-octanol/water** : Not applicable.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

**Viscosity** : Kinematic (40°C (104°F)): >20.5 $mm^2/s$ (>20.5 cSt)

**Molecular weight** : Not applicable.

## Section 10. Stability and reactivity

**Reactivity** : This product, in laboratory testing, either detonates partially, deflagrates slowly or shows a medium effect when heated under confinement.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : 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

**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. Avoid increased storage temperature. Drying on clothing or other combustible materials may cause fire.

## Section 10. Stability and reactivity

**Incompatible materials** : Reactive or incompatible with the following materials:
oxidizing materials
combustible materials
reducing materials
copper
iron
rust

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| Dimethyl Phthalate | LD50 Oral | Rat | 6800 mg/kg | - |
| Methyl Ethyl Ketone Peroxide | LC50 Inhalation Gas. | Rat | 200 ppm | 4 hours |
| | LC50 Inhalation Vapor | Rat | 3600 mg/m³ | 4 hours |
| | LD50 Oral | Rat | 1017 mg/kg | - |
| Methyl Ethyl Ketone | LD50 Dermal | Rabbit | 6480 mg/kg | - |
| | LD50 Oral | Rat | 2737 mg/kg | - |

#### Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| Methyl Ethyl Ketone | Skin - Mild irritant | Rabbit | - | 24 hours 14 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| Hydrogen Peroxide | Eyes - Severe irritant | Rabbit | - | 1 mg | - |

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Classification

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| Hydrogen Peroxide | - | 3 | - |

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

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

# Section 11. Toxicological information

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| Methyl Ethyl Ketone | Category 3 | - | Respiratory tract irritation |
| | Category 3 | | Narcotic effects |
| Hydrogen Peroxide | Category 3 | - | Respiratory tract irritation |

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

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| Methyl Ethyl Ketone | Category 2 | - | - |

**Aspiration hazard**

Not available.

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

**Potential acute health effects**

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

**Inhalation** : Toxic if inhaled.

**Skin contact** : Causes severe burns.

**Ingestion** : No known significant effects or critical hazards.

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

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

**Inhalation** : No specific data.

**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**

**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** : May cause damage to organs through prolonged or repeated exposure.

# Section 11. Toxicological information

**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

| Route | ATE value |
|---|---|
| Oral<br>Inhalation (gases)<br>Inhalation (vapors) | 2765.3 mg/kg<br>588.24 ppm<br>10.49 mg/l |

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| Dimethyl Phthalate | Acute EC50 29.6 ppm Marine water | Algae - *Skeletonema costatum* | 72 hours |
| | Acute EC50 26.1 ppm Marine water | Algae - *Skeletonema costatum* | 96 hours |
| | Acute LC50 74.9 ppm Marine water | Crustaceans - *Americamysis bahia* | 48 hours |
| | Acute LC50 33 mg/l Fresh water | Daphnia - *Daphnia magna* | 48 hours |
| | Acute LC50 29 ppm Marine water | Fish - *Cyprinodon variegatus* - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| | Chronic NOEC 9.6 mg/l Fresh water | Daphnia - *Daphnia magna* | 21 days |
| | Chronic NOEC 11 mg/l Fresh water | Fish - *Oncorhynchus mykiss* - Embryo | 102 days |
| Methyl Ethyl Ketone | Acute EC50 >500000 µg/l Marine water | Algae - *Skeletonema costatum* | 96 hours |
| | Acute EC50 5091000 µg/l Fresh water | Daphnia - *Daphnia magna* - Larvae | 48 hours |
| | Acute LC50 3220000 µg/l Fresh water | Fish - *Pimephales promelas* | 96 hours |
| Hydrogen Peroxide | Acute EC50 1.2 mg/l Marine water | Algae - *Dunaliella tertiolecta* - Exponential growth phase | 72 hours |
| | Acute EC50 2320 µg/l Fresh water | Daphnia - *Daphnia magna* - Neonate | 48 hours |
| | Acute LC50 93 ppm Fresh water | Fish - *Oncorhynchus mykiss* | 96 hours |
| | Chronic NOEC 100 mg/l Fresh water | Fish - *Micropterus salmoides* | 28 days |

## Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| Methyl Ethyl Ketone | - | - | Readily |

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Dimethyl Phthalate | - | 57 | Low |

## Mobility in soil

## Section 12. Ecological information

**Soil/water partition coefficient ($K_{OC}$)** : 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

| | DOT Classification | TDG Classification | Mexico Classification | IATA | IMDG |
|---|---|---|---|---|---|
| **UN number** | UN3105 | UN3105 | UN3105 | UN3105 | UN3105 |
| **UN proper shipping name** | ORGANIC PEROXIDE TYPE D, LIQUID | ORGANIC PEROXIDE TYPE D, LIQUID | ORGANIC PEROXIDE TYPE D, LIQUID | ORGANIC PEROXIDE TYPE D, LIQUID (Methyl Ethyl Ketone Peroxide) | ORGANIC PEROXIDE TYPE D, LIQUID |
| **Transport hazard class(es)** | 5.2   | 5.2   | 5.2   | 5.2   | 5.2   |
| **Packing group** | II | II | II | II | II |
| **Environmental hazards** | No. | No. | No. | No. | No. |
| **Additional information** | - <br> **ERG No.** <br> 145 | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.23-2.25 (Class 5). <br> **ERG No.** <br> 145 | - <br> **ERG No.** <br> 145 | - | **Emergency schedules** F-J, S-R |

## Section 14. Transport information

| | | | | | |
|---|---|---|---|---|---|
| | | | | | |

**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to IMO instruments** : Not available.

**Proper shipping name** : Not available.

## Section 15. Regulatory information

**SARA 313**

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

**SARA 302/304**

SARA 302/304 (40 CFR part 302) supplier notification can be found on the Environmental Data Sheet.

**California Prop. 65**

Not applicable.

**International regulations**

**Montreal Protocol**

Not listed.

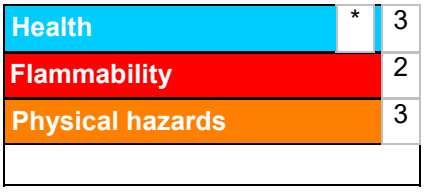
**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**International lists** : **Australia inventory (AIIC)**: Not determined.
**China inventory (IECSC)**: Not determined.
**Japan inventory (CSCL)**: Not determined.
**Japan inventory (ISHL)**: Not determined.
**Korea inventory (KECI)**: Not determined.
**New Zealand Inventory of Chemicals (NZIoC)**: Not determined.
**Philippines inventory (PICCS)**: Not determined.
**Taiwan Chemical Substances Inventory (TCSI)**: Not determined.
**Thailand inventory**: Not determined.
**Turkey inventory**: Not determined.
**Vietnam inventory**: Not determined.

## Section 16. Other information

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



# Section 16. Other information

**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.**

**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.**

**Procedure used to derive the classification**

| Classification | Justification |
|---|---|
| FLAMMABLE LIQUIDS - Category 4 | On basis of test data |
| ORGANIC PEROXIDES - Type D | Expert judgment |
| ACUTE TOXICITY (inhalation) - Category 3 | Calculation method |
| SKIN CORROSION/IRRITATION - Category 1B | Calculation method |
| SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 | Calculation method |

**History**

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**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
SGG = Segregation Group
UN = United Nations

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

**Notice to reader**

**It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.**