# SAFETY DATA SHEET

DP-LUBRICANT YELLOW

## Section 1. Identification

**GHS product identifier** : DP-LUBRICANT YELLOW

**Cat. No.** : 40700126

**Container size** : 1 l

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

**Product type** : Liquid.

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

**Product use** : Cooling and lubricating agent for grinding and polishing of materialographic specimens.

**Area of application** : Professional applications.

**Supplier's details** : Struers Inc.
24766 Detroit Rd. Westlake
Cleveland, OH 44145
United States
Telephone:+1 (440) 871 0071

**e-mail address of person responsible for this SDS** : sdsquestions@struers.dk

**Emergency telephone number (with hours of operation)** : National Capital Poison Center: 1-800-222-1222
Infotrac: 1-800-535-5053
Struers US:
1-440-871-0071

## 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** :

| | |
|---|---|
| H225 | FLAMMABLE LIQUIDS - Category 2 |
| H319 | EYE IRRITATION - Category 2A |
| H336 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| H373 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |

**GHS label elements**

**Hazard pictograms** :

**Signal word** : Danger

**Hazard statements** : H225 - Highly flammable liquid and vapor.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H373 - May cause damage to organs through prolonged or repeated exposure. (liver)

## Section 2. Hazards identification

**Precautionary statements**

**Prevention** : P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271 - Use only outdoors or in a well-ventilated area.
P260 - Do not breathe vapor.
P264 - Wash thoroughly after handling.

**Response** : P314 - Get medical advice or attention if you feel unwell.
P304 + P340, P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice or attention.

**Storage** : P405 - Store locked up.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

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

**Supplemental label elements** : Avoid contact with skin and clothing. Wash thoroughly after handling.

**Hazards not otherwise classified** : Prolonged or repeated contact may dry skin and cause irritation.

**Hazards identified when used** : No known significant effects or critical hazards.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

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

| Ingredient name | Synonyms | % | Identifiers |
|---|---|---|---|
| ethanol | - | ≥80 | CAS: 64-17-5 |
| Isopropyl alcohol | - | ≥5 - ≤10 | CAS: 67-63-0 |

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.**

## Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

# Section 4. First aid measures

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : 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. Get medical attention. If necessary, call a poison center or 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 irritation.

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

**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.

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

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
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:
irritation
dryness
cracking

**Ingestion** : No specific data.

## 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.

**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** : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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

**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. Dilute with water and mop up if water-soluble. Dispose of via a licensed waste disposal contractor.

# Section 6. Accidental release measures

**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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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.

# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| ethanol | **NIOSH REL (United States, 10/2020)**<br>TWA 10 hours: 1000 ppm.<br>TWA 10 hours: 1900 mg/m³.<br>**OSHA PEL (United States, 5/2018)**<br>TWA 8 hours: 1000 ppm.<br>TWA 8 hours: 1900 mg/m³.<br>**CAL OSHA PEL (United States, 1/2025)**<br>TWA 8 hours: 1900 mg/m³.<br>TWA 8 hours: 1000 ppm. |
| Isopropyl alcohol | **ACGIH TLV (United States, 1/2025)** A4.<br>TWA 8 hours: 200 ppm.<br>STEL 15 minutes: 400 ppm.<br>**NIOSH REL (United States, 10/2020)** |

# Section 8. Exposure controls/personal protection

| | |
|---|---|
| | TWA 10 hours: 400 ppm.<br>TWA 10 hours: 980 mg/m³.<br>STEL 15 minutes: 500 ppm.<br>STEL 15 minutes: 1225 mg/m³.<br>**OSHA PEL (United States, 5/2018)**<br>TWA 8 hours: 400 ppm.<br>TWA 8 hours: 980 mg/m³.<br>**CAL OSHA PEL (United States, 1/2025)**<br>STEL 15 minutes: 1225 mg/m³.<br>STEL 15 minutes: 500 ppm.<br>TWA 8 hours: 980 mg/m³.<br>TWA 8 hours: 400 ppm. |

**Biological exposure indices**

| Ingredient name | Exposure indices |
|---|---|
| Isopropyl alcohol | **ACGIH BEI (United States, 1/2025)**<br>BEI: 40 mg/l, acetone [in urine]. Sampling time: end of shift at end of workweek. |

**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.

**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.
Recommended: Nitrile gloves.
thickness: 0.5 mm
Breakthrough time: 240 minutes

## Section 8. Exposure controls/personal protection

**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. Recommended: Gas filter type A2.

## 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** : Yellow.

**Odor** : Alcohol.

**Odor threshold** : Not available.

**pH** : 8.2

**Melting point/freezing point** : -112°C (-169.6°F)

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

**Flash point** : Closed cup: 12°C (53.6°F)

**Evaporation rate** : Not available.

**Flammability** : Not available.

**Lower and upper explosion limit/flammability limit** : Lower: 2%
Upper: 15%

**Vapor pressure** :

| Ingredient name | Vapor Pressure at 20˚C | | | Vapor pressure at 50˚C | | |
|---|---|---|---|---|---|---|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| ethanol | 42.94865 | 5.7 | | | | |

**Relative vapor density** : Not available.

**Relative density** : 0.79

**Density** : 0.887 g/cm³

**Solubility(ies)** :

| Media | Result |
|---|---|
| water | Soluble |

**Miscible with water** : Yes.

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

**Auto-ignition temperature** : 425°C (797°F)

**Decomposition temperature** : Not available.

**SADT** : Not available.

## Section 9. Physical and chemical properties

**Viscosity** : Dynamic (room temperature): Not available.
Kinematic (room temperature): 4.5 $mm^2/s$ (4.5 cSt)
Kinematic (40°C (104°F)): Not available.

**Flow time (ISO 2431)** : Not available.

**Particle characteristics**

**Median particle size** : Not applicable.

**Additional information**

**Physical/chemical properties comments** : No additional information.

## 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.
Under normal conditions of storage and use, hazardous polymerization 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**

| Product/ingredient name | Result | |
|---|---|---|
| ethanol | **Rat - Male, Female - Oral - LD50**<br>10470 mg/kg | OECD 401 [Acute Oral Toxicity] |
| | **Rabbit - Dermal - LD50**<br>>2000 mg/kg | OECD 402 [Acute Dermal Toxicity] |
| | **Rat - Inhalation - LC50 Vapor**<br>51 mg/l [4 hours] | OECD 403 [Acute Inhalation Toxicity] |
| Isopropyl alcohol | **Rat - Oral - LD50**<br>5840 mg/kg | OECD 401 [Acute Oral Toxicity] |
| | **Rabbit - Dermal - LD50**<br>13900 mg/kg | OECD 402 [Acute Dermal Toxicity] |
| | **Rat - Inhalation - LC50 Vapor**<br>72.2 mg/l [4 hours] | |

**Conclusion/Summary [Product]** : Not available.

# Section 11. Toxicological information

**Skin corrosion/irritation**

| Product/ingredient name | Result |
|---|---|
| ethanol | **Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 400 mg |
| Isopropyl alcohol | **Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 500 mg |

**Conclusion/Summary [Product]** : Not available.

**Serious eye damage/eye irritation**

| Product/ingredient name | Result |
|---|---|
| Isopropyl alcohol | **Rabbit - Eyes - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 100 mg<br>**Rabbit - Eyes - Moderate irritant**<br>Amount/concentration applied: 10 mg<br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 100 mg |

**Conclusion/Summary [Product]** : Not available.

**Respiratory corrosion/irritation**

**Conclusion/Summary [Product]** : Not available.

**Respiratory or skin sensitization**

**Skin**

**Conclusion/Summary [Product]** : Not available.

**Respiratory**

**Conclusion/Summary [Product]** : Not available.

**Germ cell mutagenicity**

**Conclusion/Summary [Product]** : Not available.

**Carcinogenicity**

**Conclusion/Summary [Product]** : Not available.

**Classification**

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| Isopropyl alcohol | - | 3 | - |

# Section 11. Toxicological information

## Reproductive toxicity

**Conclusion/Summary [Product]** : Not available.

## Specific target organ toxicity (single exposure)

| Product/ingredient name | Result |
|---|---|
| ethanol | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |
| Isopropyl alcohol | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 |

## Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Result |
|---|---|
| Isopropyl alcohol | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (liver) - Category 2 |

## Aspiration hazard

Not available.

## Information on the likely routes of exposure

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

## Potential acute health effects

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

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

**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.

**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 or irritation
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:
irritation
dryness
cracking

**Ingestion** : No specific data.

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

**Short term exposure**

# Section 11. Toxicological information

**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**

**Conclusion/Summary [Product]** : Not available.

**General** : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

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

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

**Reproductive toxicity** : No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| DP-LUBRICANT YELLOW | N/A | 2868.3 | N/A | N/A | N/A |
| ethanol | 10470 | 2500 | N/A | 51 | N/A |
| Isopropyl alcohol | 5840 | 13900 | N/A | 72.2 | N/A |

# Section 12. Ecological information

**Toxicity**

| Product/ingredient name | Result | |
|---|---|---|
| ethanol | **Acute - LC50 - Marine water**<br>Fish - Bleak - *Alburnus alburnus*<br>Size: 8 to 10 cm<br>11 g/l [96 hours] | Effect: Mortality |
| | **Chronic - NOEC - Marine water**<br>Algae - Green algae - *Ulva pertusa*<br>4.995 mg/l [96 hours] | Effect: Reproduction |
| | **Chronic - NOEC - Fresh water**<br>Daphnia - Water flea - *Daphnia magna* - Neonate<br>Age: <24 hours<br>100 µl/l [21 days] | Effect: Mortality |
| | **Acute - LC50**<br>Fish - *Oncorhynchus mykiss*<br>13000 mg/l [96 hours] | OECD 203 [Fish, Acute Toxicity Test] |
| | **Acute - EC50**<br>Daphnia - *Ceriodaphnia dubia* | STDMETH, ASTM and USEPA E 729-80 |

# Section 12. Ecological information

| | | |
|---|---|---|
| | 5012 mg/l [48 hours]<br>**Acute - EC50**<br>Algae - *Chlorella vulgaris*<br>275 mg/l [72 hours]<br>**Acute - EC10**<br>Algae - *Chlorella vulgaris*<br>11.5 mg/l [72 hours]<br>**Acute - EC50**<br>Micro-organism<br>5800 mg/l [4 hours] | OECD 201 [Alga, Growth Inhibition Test]<br><br>OECD 201 [Alga, Growth Inhibition Test] |
| Isopropyl alcohol | **Acute - LC50 - Fresh water**<br>Fish - Fathead minnow - *Pimephales promelas*<br>Age: 31 days; Size: 20.6 mm; Weight: 0.117 g<br>9640 mg/l [96 hours]<br>**Acute - EC50**<br>Algae - *Scenedesmus subspicatus*<br>>100 mg/l [72 hours] | Effect: Mortality |

**Conclusion/Summary [Product]** : Not available.

## Persistence and degradability

| Product/ingredient name | Result | |
|---|---|---|
| ethanol | 97% [28 days] - Readily | OECD 301B [Ready Biodegradability - $CO_2$ Evolution Test] |
| Isopropyl alcohol | **Aerobic**<br>53% [5 days] - Readily | |

**Conclusion/Summary [Product]** : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| DP-LUBRICANT YELLOW | - | - | Readily |
| ethanol | - | - | Readily |
| Isopropyl alcohol | - | - | Readily |

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| ethanol | -0.35 | 0.66 | Low |
| Isopropyl alcohol | 0.05 | - | Low |

## Mobility in soil

**Soil/Water partition coefficient** : 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 | IMDG | IATA |
|---|---|---|---|---|---|
| **UN number** | UN1987 | UN1987 | UN1987 | UN1987 | UN1987 |
| **UN proper shipping name** | Alcohols, n.o.s. | ALCOHOLS, N.O.S. (ethanol, Isopropyl alcohol) | ALCOHOLES, N.E.P. (ethanol, Isopropyl alcohol) | ALCOHOLS, N.O.S. (ethanol, Isopropyl alcohol) | Alcohols, n.o.s. (ethanol, Isopropyl alcohol) |
| **Transport hazard class(es)** | 3 | 3 | 3 | 3 | 3 |
| **Packing group** | II | II | II | II | II |
| **Environmental hazards** | No. | No. | No. | No. | No. |

**Additional information**

**DOT Classification** : **Limited quantity** Yes.
**Packaging instruction** Exceptions: 4b, 150. Non-bulk: 202. Bulk: 242.
**Quantity limitation** Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.
**Special provisions** 172, IB2, T7, TP1, TP8, TP28

**TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).
**Explosive Limit and Limited Quantity Index** 1
**Passenger Carrying Road or Rail Index** 5
**Special provisions** 16, 150

**Mexico Classification** : **Special provisions** 274

**IMDG** : **Emergency schedules** F-E, S-D
**Special provisions** 274

**IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353. Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y341.
**Special provisions** A3, A180

# Section 14. Transport information

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

# Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

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

**TSCA 12(b) - Chemical export notification**

Not applicable.

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

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : FLAMMABLE LIQUIDS - Category 2
EYE IRRITATION - Category 2A
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
HNOC - Defatting irritant

**Composition/information on ingredients**

| Name | % | Classification |
|---|---|---|
| ethanol | ≥80 | FLAMMABLE LIQUIDS - Category 2<br>EYE IRRITATION - Category 2A<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3<br>HNOC - Defatting irritant |
| Isopropyl alcohol | ≥5 - ≤10 | FLAMMABLE LIQUIDS - Category 2<br>EYE IRRITATION - Category 2A<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2<br>HNOC - Defatting irritant |

# Section 15. Regulatory information

**SARA 313**

Not applicable.

**State regulations**

| | | |
|---|---|---|
| **Massachusetts** | : | The following components are listed: ETHYL ALCOHOL; ISOPROPYL ALCOHOL |
| **New York** | : | None of the components are listed. |
| **New Jersey** | : | The following components are listed: ETHYL ALCOHOL; ISOPROPYL ALCOHOL |
| **Pennsylvania** | : | The following components are listed: ETHANOL; 2-PROPANOL |

**California Prop. 65**

This product does not require a Safe Harbor warning under California Prop. 65.

**International regulations**

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

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

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

Not listed.

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

Not listed.

# Section 16. Other information

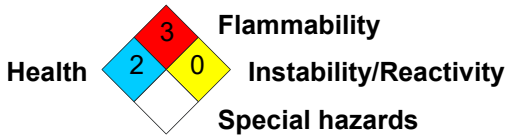
**Hazardous Material Information System (U.S.A.)**

| | | |
|---|---|---|
| **Health** | * | 2 |
| **Flammability** | | 3 |
| **Physical hazards** | | 0 |

**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.)**




**Procedure used to derive the classification**

# Section 16. Other information

| Classification | Justification |
|---|---|
| FLAMMABLE LIQUIDS - Category 2 | On basis of test data |
| EYE IRRITATION - Category 2A | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 | Calculation method |

**History**

**Date of issue/Date of revision** : 03/20/2026

**Date of previous issue** : 01/13/2025

**Version** : 2

**Prepared by** : Sphera Solutions

**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
IMO = International Maritime Organization
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
TDG = Transportation of Dangerous Goods
UN = United Nations

**References** : HCS (U.S.A.)- Hazard Communication Standard
International transport regulations

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

**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.**