

SAFETY DATA SHEET

Stainless Steel Care Fluid

Section 1. Identification

GHS product identifier	: Stainless Steel Care Fluid
Product code	: 155900
Other means of identification	: Not available.
Color	: Clear.
Product type	: Liquid.

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

Identified uses

Not available.

Uses advised against

Not applicable.

Supplier's details	: WEICON GmbH & Co. KG Königsberger Str. 255, 48157 Münster, Germany phone:+49 251 93220, email: info@weicon.de, URL: www.weicon.de
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e-mail address of person responsible for this SDS	: msds@weicon.de
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Emergency telephone number (with hours of operation)	: +1 202 464 2554 TRANSPORT (24 Hours/Day): +1 202 464 2554
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Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
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Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
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GHS label elements

Hazard pictograms



Signal word	: Danger
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Hazard statements	: H225 - Highly flammable liquid and vapor. H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.
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Precautionary statements

Section 2. Hazards identification

Prevention	: 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.
Response	: P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Storage	: Not applicable.
Disposal	: P501 - Dispose of waste according to applicable legislation.
Hazards not otherwise classified	: None known.
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	ethyl alcohol; ALCOHOL; Ethyl alcohol (Ethanol); EtOH; Grain alcohol; Cologne spirit; undenatured ethyl alcohol, of an alcoholic strength by volume of 80 % or more and containing up to 20 % activated carbon; aqueous solution, containing by weight - 25 % or more, but not more than 35 % of a copolymer of vinyl caprolactam, vinyl pyrrolidone, N,N-dimethylaminopropyl methacrylamide and 3-(methacryloylamino) propyllauryldimethylammonium chloride, - 10 % or more, but not more than 16 % of ethanol whether or not denatured with tert-butyl alcohol and/or denatonium benzoate; Blend, consisting of ethyl alcohol, ethyl acetate and aldehydes, higher alcohols and water; blend, consisting of ethyl alcohol, ethyl acetate and water; Denatured Alcohol	≥15 - ≤40	CAS: 64-17-5
Naphtha (petroleum), hydrotreated light	Low boiling point hydrogen treated naphtha; Naphtha, petroleum, hydrotreated light; Hydrotreated light, straight run, petroleum; naphtha (petroleum), hydrotreated light, as light oils; low boiling point hydrogen treated naphtha, as light oils; Hydrotreated light straight run (petroleum); Naphtha (petroleum), hydrotreated light, Low boiling point hydrogen treated naphtha	≥15 - ≤40	CAS: 64742-49-0
2-butoxyethanol	ethylene glycol monobutyl ether; butyl cellosolve; Ethanol,	≥10 - ≤30	CAS: 111-76-2

Section 3. Composition/information on ingredients

	2-butoxy-; Butylglycol; Ethylene glycol, mono-n-butyl ester; Jeffersol EB; Ektasolve EB; Dowanol EB; Butyl oxitol; EGBE; Butyl cellosolve7		
Naphtha (petroleum), hydrotreated heavy	Low boiling point hydrogen treated naphtha; Hydrotreated heavy naphtha (petroleum); Hydrotreated light steam cracked naphtha residuum (petroleum); Naphtha, petroleum, hydrotreated heavy; Hydrotreated light, steam cracked naphtha residuum, petroleum; Hydrotreated heavy naphtha; Naphtha, (petroleum), heavy, hydrotreated; NAPHTHA	≥10 - ≤30	CAS: 64742-48-9
White mineral oil (petroleum)	White mineral oil, petroleum; White spirits; Mineral oil; Paraffin oil; WHITE MINERAL OIL; Paraffinum liquidum; mineral oils (lubricant, base oils, and derived products) (general: 8002-05-9) (untreated vacuum distillates; acid-treated oils; aromatic oils; mildly solvent-refined oils; mildly hydro-treated oils; used gasoline-engine oil; and mineral oils used in mulespinning, metal machining, and jute processing); OILS, WHITE MINERAL, PETROLEUM; petroleum mineral oil; LIGHT MINERAL OIL	≥3 - ≤7	CAS: 8042-47-5
Isopropyl alcohol	isopropanol; 2-Propanol	≥1 - ≤5	CAS: 67-63-0
(R)-p-mentha-1,8-diene	d-limonene; Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (4R)-; Cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-; Limonene, D-; (4R)-1-methyl-4-(prop-1-en-2-yl)cyclohexene; (+)-limonene; (4R)-1-methyl-4-(1-methylethenyl)cyclohexene; (R)-4-isopropenyl-1-methylcyclohexene; (4R)-1-methyl-4-(prop-1-en-2-yl)cyclohex-1-ene; LIMONENE, (+)-; P-MENTHA-1,8-DIENE, (R)-(+)-	≥1 - ≤5	CAS: 5989-27-5

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** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

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, 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. 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. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. 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	<p>NIOSH REL (United States, 10/2020) TWA 10 hours: 1000 ppm. TWA 10 hours: 1900 mg/m³.</p> <p>CAL OSHA PEL (United States, 1/2025) TWA 8 hours: 1900 mg/m³. TWA 8 hours: 1000 ppm.</p> <p>OSHA PEL (United States, 5/2018) TWA 8 hours: 1000 ppm. TWA 8 hours: 1900 mg/m³.</p> <p>OSHA PEL 1989 (United States, 3/1989) TWA 8 hours: 1000 ppm. TWA 8 hours: 1900 mg/m³.</p> <p>ACGIH TLV (United States, 1/2025) A3. STEL 15 minutes: 1000 ppm.</p>
Naphtha (petroleum), hydrotreated light 2-butoxyethanol	<p>None.</p> <p>NIOSH REL (United States, 10/2020) Absorbed through skin. TWA 10 hours: 5 ppm. TWA 10 hours: 24 mg/m³.</p> <p>CAL OSHA PEL (United States, 1/2025) Absorbed through skin. TWA 8 hours: 97 mg/m³. TWA 8 hours: 20 ppm.</p> <p>OSHA PEL (United States, 5/2018) Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 240 mg/m³.</p> <p>OSHA PEL 1989 (United States, 3/1989)</p>

Section 8. Exposure controls/personal protection

Naphtha (petroleum), hydrotreated heavy White mineral oil (petroleum)	<p>Absorbed through skin. TWA 8 hours: 25 ppm. TWA 8 hours: 120 mg/m³. ACGIH TLV (United States, 1/2025) A3. TWA 8 hours: 20 ppm.</p>
Isopropyl alcohol	<p>None. NIOSH REL (United States, 10/2020) [OIL MIST MINERAL] TWA 10 hours: 5 mg/m³. Form: Mist. STEL 15 minutes: 10 mg/m³. Form: Mist. OSHA PEL (United States, 5/2018) [Oil mist, mineral] TWA 8 hours: 5 mg/m³. ACGIH TLV (United States, 1/2025) [Mineral Oil, pure, highly and severely refined] A4. TWA 8 hours: 5 mg/m³. Form: Inhalable fraction. NIOSH REL (United States, 10/2020) TWA 10 hours: 400 ppm. TWA 10 hours: 980 mg/m³. STEL 15 minutes: 500 ppm. STEL 15 minutes: 1225 mg/m³. CAL OSHA PEL (United States, 1/2025) STEL 15 minutes: 1225 mg/m³. STEL 15 minutes: 500 ppm. TWA 8 hours: 980 mg/m³. TWA 8 hours: 400 ppm. OSHA PEL (United States, 5/2018) TWA 8 hours: 400 ppm. TWA 8 hours: 980 mg/m³. OSHA PEL 1989 (United States, 3/1989) TWA 8 hours: 400 ppm. TWA 8 hours: 980 mg/m³. STEL 15 minutes: 500 ppm. STEL 15 minutes: 1225 mg/m³. ACGIH TLV (United States, 1/2025) A4. TWA 8 hours: 200 ppm. STEL 15 minutes: 400 ppm.</p>
(R)-p-mentha-1,8-diene	<p>OARS WEEL (United States, 9/2024) TWA 8 hours: 30 ppm.</p>

Biological exposure indices

Ingredient name	Exposure indices
2-butoxyethanol	<p>ACGIH BEI (United States, 1/2025) BEI: 200 mg/g creatinine, butoxyacetic acid (BAA) [in urine]. Sampling time: end of shift.</p>
Isopropyl alcohol	<p>ACGIH BEI (United States, 1/2025) BEI: 40 mg/l, acetone [in urine]. Sampling time: end of shift at end of workweek.</p>

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.

Section 8. Exposure controls/personal protection

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. Contaminated work clothing should not be allowed out of the workplace. 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. Recommended : 1 - 4 hours (breakthrough time): Protective gloves made of nitrile rubber (material thickness of 0,4 mm); EN 374-5 Cat. III ; 4 - 8 hours (breakthrough time): Protective gloves made of Viton®/ butyl rubber (material thickness of 0,7 mm); EN388 Cat.II / EN374 Cat.III / EN374-2
- 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 : organic vapor (Type AX) and particulate filter

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** : Clear.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : 78°C (172.4°F)
- Flash point** : Closed cup: -18 to 23°C (-0.4 to 73.4°F)
- Evaporation rate** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Lower: 0.6%
Upper: 15%
- Vapor pressure** : 12.4 kPa (92.9 mm Hg) [50°C (122°F)]
- Relative vapor density** : Not available.
- Relative density** : Not available.

Section 9. Physical and chemical properties

Density	: 0.779 g/cm ³ [20925.9°C (37698.6°F)]
Solubility in water	: Not available.
Miscible with water	: No.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): <20 mm ² /s (<20 cSt)

Particle characteristics

Median particle size	: Not applicable.
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Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name

ethanol

Result

Rat - Oral - LD50

7 g/kg

Rat - Inhalation - LC50 Vapor124700 mg/m³ [4 hours]**Rat - Intraperitoneal - LD50**

220 mg/kg

Rat - Intravenous - LD50

307 mg/kg

Rat - Unreported - LD50

917 mg/kg

Toxic effects: Behavioral - Somnolence (general depressed activity) Behavioral - Excitement Lung, Thorax, or Respiration - Other changes

Mouse - Oral - LD50

1230 mg/kg

Toxic effects: Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Somnolence (general depressed activity) Other - Hair

Mouse - Intraperitoneal - LD50

536 mg/kg

Mouse - Intravenous - LD50

Section 11. Toxicological information

1130 mg/kg

Mouse - Unreported - LD50

1050 mg/kg

Toxic effects: Behavioral - Somnolence (general depressed activity) Behavioral - Excitement Lung, Thorax, or Respiration - Other changes

Rabbit - Dermal - LD50

220 mg/kg

Rabbit - Intraperitoneal - LD50

220 mg/kg

Rabbit - Intravenous - LD50

252 mg/kg

Guinea pig - Oral - LD50

1200 mg/kg

Toxic effects: Behavioral - General anesthetic Gastrointestinal - Other changes Kidney, Ureter, and Bladder - Other changes

Guinea pig - Dermal - LD50

230 ul/kg

Mammal - species unspecified - Unreported - LD50

1500 mg/kg

Mouse - Oral - LD50

1167 mg/kg

Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes Blood - Other hemolysis with or without anemia

Rat - Oral - LD50

917 mg/kg

Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes Blood - Other hemolysis with or without anemia

Rabbit - Oral - LD50

320 mg/kg

Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes Blood - Other hemolysis with or without anemia

Rat - Oral - LD50

250 mg/kg

Mouse - Subcutaneous - LDLo

500 mg/kg

Human - Oral - LDLo

143 mg/kg

Rat - Oral - LDLo

1500 mg/kg

Toxic effects: Lung, Thorax, or Respiration - Changes in pulmonary vascular resistance

Woman - Female - Oral - TDLo

600 mg/kg

Toxic effects: Behavioral - Coma Lung, Thorax, or Respiration - Dyspnea Changes in Chemistry or Temperature - Metabolic acidosis

Woman - Female - Oral - TDLo

7813 ul/kg

Toxic effects: Behavioral - Coma Vascular - BP lowering not characterized in autonomic section Changes in Chemistry or Temperature - Metabolic acidosis

Mammal - species unspecified - Intraperitoneal - TDLo

100 mg/kg

Toxic effects: Endocrine - Change in gonadotropins

Rat - Oral - TDLo

500 mg/kg

Toxic effects: Blood - Other hemolysis with or without anemia

Rat - Unreported - TDLo

250 mg/kg

Toxic effects: Blood - Change in clotting factors

Section 11. Toxicological information

Man - Male - Oral - TDLo

132 mg/kg

Toxic effects: Behavioral - Sleep Kidney, Ureter, and Bladder - Hematuria Changes in Chemistry or Temperature - Metabolic acidosis

Rat - Inhalation - LC50 Gas.

450 ppm [4 hours]

Toxic effects: Behavioral - Ataxia Gross Metabolite Changes - Weight loss or decreased weight gain

Rat - Inhalation - LC50 Vapor

8500 mg/m³ [4 hours]

Toxic effects: Lung, Thorax, or Respiration - Other changes

Rat - Oral - LD50

>5000 mg/kg

Rabbit - Dermal - LD50

12800 mg/kg

Rat - Oral - LD50

5000 mg/kg

Toxic effects: Behavioral - General anesthetic

Rat - Oral - LD50

4400 mg/kg

Toxic effects: Behavioral - Changes in motor activity (specific assay) Lung, Thorax, or Respiration - Respiratory depression
Other - Hair

Rabbit - Dermal - LD50

>5000 mg/kg

Naphtha (petroleum), hydrotreated heavy

White mineral oil (petroleum)

Isopropyl alcohol

(R)-p-mentha-1,8-diene

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Product/ingredient name

2-butoxyethanol

Isopropyl alcohol

(R)-p-mentha-1,8-diene

Result

Rabbit - Skin - Mild irritant

Amount/concentration applied: 500 mg

Rabbit - Skin - Mild irritant

Amount/concentration applied: 500 mg

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 10 %

Mouse - Skin - Severe irritant

Duration of treatment/exposure: 168 hours

Amount/concentration applied: 700 mg l

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name

ethanol

2-butoxyethanol

Isopropyl alcohol

Result

Rabbit - Eyes - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Rabbit - Eyes - Mild irritant

Duration of treatment/exposure: 1 hours

Amount/concentration applied: 50 pph

Rabbit - Eyes - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 mg

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 100 mg

Rabbit - Eyes - Moderate irritant

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Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 mg

Rabbit - Eyes - Moderate irritant

Amount/concentration applied: 10 mg

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 100 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
ethanol	-	1	-
2-butoxyethanol	-	3	-
Isopropyl alcohol	-	3	-
(R)-p-mentha-1,8-diene	-	3	-

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name **Result**

Section 11. Toxicological information

Naphtha (petroleum), hydrotreated light	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Naphtha (petroleum), hydrotreated heavy	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
propan-2-ol	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Naphtha (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1
Naphtha (petroleum), hydrotreated heavy	ASPIRATION HAZARD - Category 1
HIGHLY REFINED BASE OILS Viscosity \leq 20.5 mm ² /s at 40°C	ASPIRATION HAZARD - Category 1
(R)-p-mentha-1,8-diene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Not available.

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	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
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 redness
Ingestion	: Adverse symptoms may include the following: nausea or vomiting

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.

Section 11. Toxicological information

Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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)
Stainless Steel Care Fluid	8160.6	N/A	N/A	20.4	N/A
ethanol	7000	N/A	N/A	124.7	N/A
2-butoxyethanol	1200	N/A	N/A	3	N/A
propan-2-ol	5000	12800	N/A	N/A	N/A
(R)-p-mentha-1,8-diene	4400	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name

ethanol

Result

Acute - LC50 - Marine water

Crustaceans - San Francisco Brine Shrimp - *Artemia franciscana* - Larvae

25.5 mg/l [48 hours]

Effect: Mortality

Acute - LC50 - Marine water

Fish - Bleak - *Alburnus alburnus*

Size: 8 to 10 cm

11 g/l [96 hours]

Effect: Mortality

Acute - LC50 - Fresh water

Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate

5577 mg/l [48 hours]

Effect: Mortality

Acute - LC50 - Fresh water

Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate

3715 mg/l [48 hours]

Effect: Mortality

Acute - LC50 - Fresh water

Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate

6076 mg/l [48 hours]

Effect: Mortality

Acute - LC50 - Fresh water

Daphnia - Water flea - *Daphnia magna* - Neonate

Age: <12 hours

9248 mg/l [48 hours]

Effect: Mortality

Section 12. Ecological information

Acute - LC50 - Fresh water

Daphnia - Water flea - *Daphnia magna* - Neonate

Age: <24 hours

5680 mg/l [48 hours]

Effect: Mortality

Acute - LC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*

Size: 25 to 40 mm

1.272 pph [96 hours]

Effect: Mortality

Acute - EC50 - Marine water

Algae - Green algae - *Ulva pertusa*

17.921 mg/l [96 hours]

Effect: Reproduction

Chronic - NOEC - Marine water

Algae - Green algae - *Ulva pertusa*

4.995 mg/l [96 hours]

Effect: Reproduction

Chronic - NOEC - Fresh water

Algae - Dinoflagellate - *Prorocentrum minimum*

20 ppm [96 hours]

Effect: Population

Chronic - NOEC - Fresh water

Algae - Euglenoid - *Eutreptiella sp.*

14 ppm [96 hours]

Effect: Population

Chronic - NOEC - Fresh water

Algae - Algae - *Heterosigma akashiwo*

350 ppm [96 hours]

Effect: Population

Acute - EC50 - Fresh water

Crustaceans - Ostracod - *Cypris subglobosa*

1074 mg/l [48 hours]

Effect: Intoxication

Acute - EC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*

Age: 30 days

12.9 g/l [96 hours]

Effect: Behavior

Chronic - NOEC - Marine water

Algae - Neptune's Necklace - *Hormosira banksii* - Gamete

50 µl/l [72 hours]

Effect: Histology

Acute - EC50 - Fresh water

OECD

Daphnia - Water flea - *Daphnia magna*

Age: 8 to 24 hours

7640 mg/l [48 hours]

Effect: Intoxication

Acute - EC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*

Age: 31 days; Size: 22 mm; Weight: 0.14 g

12.8 g/l [96 hours]

Effect: Behavior

Acute - EC50 - Marine water

Algae - Green algae - *Ulva pertusa*

Size: 9.4 mm

3306 mg/l [96 hours]

Effect: Reproduction

Acute - LC50 - Fresh water

Fish - Rainbow trout, donaldson trout - *Oncorhynchus mykiss*

Section 12. Ecological information

42 mg/l [4 days]

Effect: Mortality**Chronic - NOEC - Fresh water**Fish - Eastern mosquitofish - *Gambusia holbrooki* - LarvaeAge: 3 days

0.375 µl/l [12 weeks]

Effect: Morphology**Chronic - NOEC - Fresh water**Daphnia - Water flea - *Daphnia magna* - NeonateAge: <24 hours

100 µl/l [21 days]

Effect: Mortality**Acute - EC50 - Fresh water**Daphnia - Water flea - *Daphnia magna*

2 mg/l [48 hours]

Effect: Intoxication

2-butoxyethanol

Acute - LC50 - Marine waterCrustaceans - Common shrimp, sand shrimp - *Crangon crangon*

800 mg/l [48 hours]

Effect: Mortality**Acute - LC50 - Marine water**Fish - Inland silverside - *Menidia beryllina*

1250 ppm [96 hours]

Effect: Mortality

Isopropyl alcohol

Acute - LC50 - Marine waterCrustaceans - Common shrimp, sand shrimp - *Crangon crangon*

1400 mg/l [48 hours]

Effect: Mortality**Acute - LC50 - Fresh water**Fish - Harlequinfish, red rasbora - *Rasbora heteromorpha*Size: 1 to 3 cm

4200 mg/l [96 hours]

Effect: Mortality

(R)-p-mentha-1,8-diene

Acute - EC50 - Fresh water

ASTM

Fish - Fathead minnow - *Pimephales promelas* - Juvenile (Fledgling, Hatchling, Weanling)Age: 34 days; Size: 19.1 mm; Weight: 0.085 g

688 µg/l [96 hours]

Effect: Behavior**Acute - EC50 - Fresh water**

ASTM

Daphnia - Water flea - *Daphnia magna*Age: <24 hours

421 µg/l [48 hours]

Effect: Intoxication**Conclusion/Summary [Product]** : Not available.**Persistence and degradability**

Not available.

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

Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
ethanol	-0.35	-	Low
Naphtha (petroleum), hydrotreated light	2.2 to 5.2	10 to 2500	High
2-butoxyethanol	0.81	-	Low
Naphtha (petroleum), hydrotreated heavy	-	10 to 2500	High
White mineral oil (petroleum)	>6	-	High
Isopropyl alcohol	0.05	-	Low
(R)-p-mentha-1,8-diene	4.38	-	High

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	UN1993	UN1993	UN1993	UN1993	UN1993
UN proper shipping name	Flammable liquids, n.o.s. (ethanol, Naphtha (petroleum), hydrotreated light)	FLAMMABLE LIQUID, N.O.S. (ethanol, Naphtha (petroleum), hydrotreated light)	LÍQUIDO INFLAMABLE, N. E.P. (ethanol, Naphtha (petroleum), hydrotreated light)	FLAMMABLE LIQUID, N.O.S. (ethanol, Naphtha (petroleum), hydrotreated light)	Flammable liquid, n.o.s. (ethanol, Naphtha (petroleum), hydrotreated light)
Transport hazard class(es)	3 	3  	3 	3  	3 
Packing group	II	II	II	II	II
Environmental hazards	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Section 14. Transport information

Additional information

- DOT Classification** : **Limited quantity** Yes.
Packaging instruction Exceptions: 150. Non-bulk: 202. Bulk: 242.
Quantity limitation Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.
Special provisions 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), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.
Explosive Limit and Limited Quantity Index 1
Passenger Carrying Road or Rail Index 5
Special provisions 16, 150
- Mexico Classification** : **Special provisions** 274
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-E, _S-E_
Special provisions 274
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.
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
- 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

TSCA 12(b) - Chemical export notification

Not applicable.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not 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

Section 15. Regulatory information

Classification : FLAMMABLE LIQUIDS - Category 2
 SKIN IRRITATION - Category 2
 EYE IRRITATION - Category 2A
 SKIN SENSITIZATION - Category 1
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
 ASPIRATION HAZARD - Category 1

Composition/information on ingredients

Name	%	Classification
ethanol	≥15 - ≤40	FLAMMABLE LIQUIDS - Category 2
Naphtha (petroleum), hydrotreated light	≥15 - ≤40	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
2-butoxyethanol	≥10 - ≤30	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
Naphtha (petroleum), hydrotreated heavy	≥10 - ≤30	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
White mineral oil (petroleum)	≥3 - ≤7	ASPIRATION HAZARD - Category 1
Isopropyl alcohol	≥1 - ≤5	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
(R)-p-mentha-1,8-diene	≥1 - ≤5	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1B ASPIRATION HAZARD - Category 1

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	2-butoxyethanol	111-76-2	≥10 - ≤30
Supplier notification	2-butoxyethanol	111-76-2	≥10 - ≤30

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: ETHYL ALCOHOL; 2-BUTOXYETHANOL; OIL MIST, MINERAL; ISOPROPYL ALCOHOL

New York : None of the components are listed.

New Jersey : The following components are listed: ETHYL ALCOHOL; 2-BUTOXY ETHANOL; ISOPROPYL ALCOHOL

Pennsylvania : The following components are listed: ETHANOL; ETHANOL, 2-BUTOXY-; 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.

Section 15. Regulatory information

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.

Inventory list

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

Section 16. Other information

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

Health	/	3
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
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

History

Date of printing : 2/3/2026
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Version : 1.6

Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 DOT = Department of Transportation
 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 : Not available.

 Indicates information that has changed from previously issued version.

Notice to reader

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