

SAFETY DATA SHEET

Creation Date 29-Jan-2018

Revision Date 18-Dec-2025

Revision Number 3

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

1. Identification

| | |
|---|---|
| Product Name | Ethanol, denatured |
| Cat No. : | AC463700000; AC463700025; AC463700050; AC463800250 |
| Synonyms | No information available |
| Recommended Use Uses advised against | Laboratory chemicals. Food, drug, pesticide or biocidal product use. |

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

| | |
|--|------------|
| Flammable liquids | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Central nervous system (CNS). | |

Label Elements

Signal Word
Danger

Hazard Statements

Highly flammable liquid and vapor
Causes serious eye irritation
May cause drowsiness or dizziness



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground and bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Wear protective gloves/protective clothing/eye protection/face protection

Take action to prevent static discharges

Use non-sparking tools

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

Fire

In case of fire: Use CO₂, dry chemical, or foam to extinguish

Storage

Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Repeated exposure may cause skin dryness or cracking

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

Other hazards

Contains a known or suspected endocrine disruptor.

3. Composition/information on Ingredients

| Component | CAS No | Weight % |
|---------------------|-----------|----------|
| Ethyl alcohol | 64-17-5 | >95 |
| Methyl ethyl ketone | 78-93-3 | 1 |
| Isopropyl alcohol | 67-63-0 | 1 |
| Denatonium benzoate | 3734-33-6 | 0.001 |

4. First-aid measures

General Advice

If symptoms persist, call a physician.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

| | |
|--|--|
| | symptoms occur. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. |
| Most important symptoms and effects | Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| | |
|---|---|
| Suitable Extinguishing Media | Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | 12 °C / 53.6 °F |
| Method - | No information available |
| Autoignition Temperature | 363 °C / 685.4 °F |
| Explosion Limits | |
| Upper | No data available |
| Lower | No data available |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products

None known.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2 | 3 | 0 | N/A |

6. Accidental release measures

| | |
|---|---|
| Personal Precautions | Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges. |
| Environmental Precautions | Do not flush into surface water or sanitary sewer system. |
| Methods for Containment and Clean Up | Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. |

7. Handling and Storage

| | |
|-----------------|---|
| Handling | Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges. |
| Storage. | Keep away from heat, sparks and flame. Flammables area. Keep container tightly closed in a dry and well-ventilated place. |

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH | Mexico OEL (TWA) |
|---------------------|-------------------------------|---|---|-------------------------------|
| Ethyl alcohol | STEL: 1000 ppm | (Vacated) TWA: 1000 ppm (Vacated) TWA: 1900 mg/m ³ TWA: 1000 ppm TWA: 1900 mg/m ³ | IDLH: 3300 ppm REL = 1000 ppm (TWA) REL = 1900 mg/m ³ (TWA) | STEL: 1000 ppm |
| Methyl ethyl ketone | TWA: 200 ppm STEL: 300 ppm | (Vacated) TWA: 200 ppm (Vacated) TWA: 590 mg/m ³ (Vacated) STEL: 300 ppm (Vacated) STEL: 885 mg/m ³ TWA: 200 ppm TWA: 590 mg/m ³ | IDLH: 3000 ppm REL = 200 ppm (TWA) REL = 590 mg/m ³ (TWA) STEL: 300 ppm STEL: 885 mg/m ³ | TWA: 200 ppm STEL: 300 ppm |
| Isopropyl alcohol | TWA: 200 ppm STEL: 400 ppm | (Vacated) TWA: 400 ppm (Vacated) TWA: 980 mg/m ³ (Vacated) STEL: 500 ppm (Vacated) STEL: 1225 mg/m ³ TWA: 400 ppm TWA: 980 mg/m ³ | IDLH: 2000 ppm REL = 400 ppm (TWA) REL = 980 mg/m ³ (TWA) STEL: 500 ppm STEL: 1225 mg/m ³ | TWA: 200 ppm STEL: 400 ppm |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment.

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type:

Organic gases and vapours filter. Type A. Brown. conforming to EN14387.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Physical State

Liquid

Color

No information available

Odor

No information available

Odor Threshold

No information available

Property

Values

Remarks

• Method

Melting Point/Range

-114.1 °C / -173.4 °F

Softening Point

No data available

| | | |
|--|---------------------------------------|--|
| Boiling Point/Range | 78 °C / 172.4 °F | @ 760 mmHg |
| Flash Point | 12 °C / 53.6 °F | Method - No information available |
| Flammability (liquid) | Highly flammable | On basis of test data |
| Flammability (solid,gas) | Not applicable | Liquid |
| Explosion Limits | Lower 2.5 Upper 13.5 | |
| Autoignition Temperature | 363 °C / 685.4 °F | |
| Decomposition Temperature | No data available | |
| pH | 5.7 | |
| Viscosity | No data available | |
| Water Solubility | Soluble | |
| Solubility in other solvents | No information available | |
| Partition Coefficient (n-octanol/water) | | |
| Component | log Pow | |
| Ethyl alcohol | -0.32 | |
| Methyl ethyl ketone | 0.29 | |
| Isopropyl alcohol | 0.05 | |
| Denatonium benzoate | 2.2 | |
| Vapor Pressure | 57 hPa @ 20°C | |
| Density / Specific Gravity | 0.79 | |
| Bulk Density | Not applicable | Liquid |
| Vapor Density | No data available | (Air = 1.0) |
| Particle characteristics | Not applicable (liquid) | |

Other Information

| | |
|-----------------------------|---|
| Explosive Properties | Vapors may form explosive mixtures with air |
|-----------------------------|---|

10. Stability and reactivity

| | |
|---|---|
| Reactive Hazard | None known, based on information available |
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Keep away from open flames, hot surfaces and sources of ignition. |
| Incompatible Materials | Strong oxidizing agents |
| Hazardous Decomposition Products | None under normal use conditions |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information**Information on expected route of exposure**

| | |
|-------------------|--|
| Inhalation | Avoid breathing vapors or mists. |
| Ingestion | May be harmful if swallowed. |
| Eyes | Avoid contact with eyes. Irritating to eyes. Vapor may cause irritation. |
| Skin | Avoid contact with skin. May cause irritation. Prolonged skin contact may defat the skin and produce dermatitis. |

Toxicology data for the components

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|--|-------------|---|
| Ethyl alcohol | LD50 = 10470 mg/kg OECD 401 (Rat) 3450 mg/kg (Mouse) | - | LC50 = 117-125 mg/l (4h) OECD 403 (rat) 20000 ppm/10H (rat) |

| | | | |
|---------------------|--|------------------------------|------------------------------|
| Methyl ethyl ketone | LD50 = 2483 mg/kg (Rat) | LD50 = 5000 mg/kg (Rabbit) | LC50 = 11700 ppm (Rat) 4 h |
| Isopropyl alcohol | 5045 mg/kg (Rat) 3600 mg/kg (Mouse) | 12800 mg/kg (Rat) | 72.6 mg/L (Rat) 4 h |
| Denatonium benzoate | LD50 = 584 mg/kg (Rat) | LD50 > 2000 mg/kg (Rat) | LC50 = 0.2 mg/L (Rat) 4 h |

Toxicologically Synergistic Products No information available

(b) skin corrosion/irritation; Based on available data, the classification criteria are not met

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;
Respiratory Based on available data, the classification criteria are not met
Skin Based on available data, the classification criteria are not met

| Component | Test method | Test species | Study result |
|----------------------------------|--|-------------------------|---|
| Ethyl alcohol 64-17-5 (>95) | Mouse Ear Swelling Test (MEST) ----- OECD Test Guideline 429 Local Lymph Node Assay | mouse ----- mouse | non-sensitising ----- non-sensitising |

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

| Component | Test method | Test species | Study result |
|----------------------------------|--|--|-------------------------------|
| Ethyl alcohol 64-17-5 (>95) | AMES test OECD Test Guideline 471 ----- Gene cell mutation OECD Test Guideline 476 | in vitro Bacteria ----- in vitro Mammalian | negative ----- negative |

(f) carcinogenicity; Based on available data, the classification criteria are not met

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|---------------------|-----------|------------|------------|------------|------------|------------|
| Ethyl alcohol | 64-17-5 | Not listed | Known | A3 | Not listed | A3 |
| Methyl ethyl ketone | 78-93-3 | Not listed |
| Isopropyl alcohol | 67-63-0 | Not listed |
| Denatonium benzoate | 3734-33-6 | Not listed |

IARC (International Agency for Research on Cancer)

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A1 - Confirmed Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Confirmed Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen

NTP: (National Toxicity Program)

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A5 - Not Suspected as a Human Carcinogen

(g) reproductive toxicity;

Based on available data, the classification criteria are not met

| Component | Test method | Test species / Duration | Study result |
|----------------------------------|-------------------------|------------------------------|-----------------------|
| Ethyl alcohol 64-17-5 (>95) | OECD Test Guideline 416 | Oral / mouse 2 Generation | NOAEL = 13.8 g/kg/day |
| | OECD Test Guideline 414 | Inhalation / Rat | NOAEC = 16000 ppm |

(h) STOT-single exposure;

Based on available data, the classification criteria are not met

Results / Target organs

Central nervous system (CNS).

(i) STOT-repeated exposure;

Based on available data, the classification criteria are not met

Target Organs

None known.

(j) aspiration hazard;

Based on available data, the classification criteria are not met

Symptoms / effects,both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Other Adverse Effects

The toxicological properties have not been fully investigated.

Endocrine Disrupting Properties

Assess endocrine disrupting properties for human health

Contains a substance on the National Authorities Endocrine Disruptor Lists

| Component | EU National Authorities Endocrine Disruptor Lists - Health |
|--------------------------------------|--|
| Methyl ethyl ketone 78-93-3 (1) | List II |

12. Ecological information

Ecotoxicity

Contains a substance which is: Toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---------------------|--|--|---|--|
| Ethyl alcohol | EC50 (72h) = 275 mg/l (Chlorella vulgaris) | Fathead minnow (Pimephales promelas) LC50 = 14200 mg/l/96h | Photobacterium phosphoreum:EC50 = 34634 mg/L/30 min Photobacterium phosphoreum:EC50 = 35470 mg/L/5 min | EC50 = 9268 mg/L/48h EC50 = 10800 mg/L/24h |
| Methyl ethyl ketone | Not listed | Lepomis macrochirus: LC50=3,22 g/L 96 h | EC50 = 3403 mg/L 30 min EC50 = 3426 mg/L 5 min | EC50: = 5091 mg/L, 48h (Daphnia magna) EC50: 4025 - 6440 mg/L, 48h Static (Daphnia magna) EC50: > 520 mg/L, 48h (Daphnia magna) |
| Isopropyl alcohol | EC50: > 1000 mg/L, 72h (Desmodesmus subspicatus) EC50: > 1000 mg/L, 96h (Desmodesmus subspicatus) | LC50: = 9640 mg/L, 96h flow-through (Pimephales promelas) LC50: > 1400000 µg/L, 96h (Lepomis macrochirus) LC50: = 11130 mg/L, 96h | = 35390 mg/L EC50 Photobacterium phosphoreum 5 min | 13299 mg/L EC50 = 48 h 9714 mg/L EC50 = 24 h |

| | | | | |
|--|--|--|--|--|
| | | static (Pimephales promelas) LC50: = 10000000 µg/L, 96h (Daphnia) | | |
|--|--|--|--|--|

Persistence and Degradability Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its volatility.

| Component | log Pow |
|---------------------|---------|
| Ethyl alcohol | -0.32 |
| Methyl ethyl ketone | 0.29 |
| Isopropyl alcohol | 0.05 |
| Denatonium benzoate | 2.2 |

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| Component | RCRA - U Series Wastes | RCRA - P Series Wastes |
|-------------------------------|------------------------|------------------------|
| Methyl ethyl ketone - 78-93-3 | U159 | - |

14. Transport information

DOT

| | |
|-----------------------------|---------|
| UN-No | UN1170 |
| Proper Shipping Name | ETHANOL |
| Hazard Class | 3 |
| Packing Group | II |

TDG

| | |
|-----------------------------|---------|
| UN-No | UN1170 |
| Proper Shipping Name | ETHANOL |
| Hazard Class | 3 |
| Packing Group | II |

IATA

| | |
|-----------------------------|---------|
| UN-No | UN1170 |
| Proper Shipping Name | ETHANOL |
| Hazard Class | 3 |
| Packing Group | II |

IMDG/IMO

| | |
|-----------------------------|---------|
| UN-No | UN1170 |
| Proper Shipping Name | ETHANOL |
| Hazard Class | 3 |
| Packing Group | II |

15. Regulatory Information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---------------------|-----------|------|---|-----------------------------|
| Ethyl alcohol | 64-17-5 | X | ACTIVE | - |
| Methyl ethyl ketone | 78-93-3 | X | ACTIVE | - |
| Isopropyl alcohol | 67-63-0 | X | ACTIVE | - |
| Denatonium benzoate | 3734-33-6 | X | ACTIVE | - |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) Not applicable

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|---------------------|-----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Ethyl alcohol | 64-17-5 | X | - | 200-578-6 | X | X | X | X | X | KE-13217 |
| Methyl ethyl ketone | 78-93-3 | X | - | 201-159-0 | X | X | X | X | X | KE-24094 |
| Isopropyl alcohol | 67-63-0 | X | - | 200-661-7 | X | X | X | X | X | KE-29363 |
| Denatonium benzoate | 3734-33-6 | X | - | 223-095-2 | X | X | | X | X | KE-11775 |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Component | CAS No | Weight % | SARA 313 - Threshold Values % | SARA 313 - Reporting thresholds |
|-------------------|---------|----------|-------------------------------|---------------------------------|
| Isopropyl alcohol | 67-63-0 | 1 | 1.0 % | - |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

| Component | Hazardous Substances RQs | CERCLA Extremely Hazardous Substances RQs | SARA Reportable Quantity (RQ) |
|---------------------|--------------------------|---|-------------------------------|
| Methyl ethyl ketone | 5000 lb | - | 5000 lb 2270 kg |

California Proposition 65

This product contains the following Proposition 65 chemicals.

| Component | CAS No | California Prop. 65 | Prop 65 NSRL | Category |
|---------------|---------|--|--------------|--------------------------|
| Ethyl alcohol | 64-17-5 | Development (alcoholic beverages only) Carcinogen | - | Developmental Carcinogen |

U.S. State Right-to-Know Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---------------------|---------------|------------|--------------|----------|--------------|
| Ethyl alcohol | X | X | X | X | X |
| Methyl ethyl ketone | X | X | X | X | X |
| Isopropyl alcohol | X | X | X | - | X |

U.S. Department of Transportation

Reportable Quantity (RQ): Y
 DOT Marine Pollutant N
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---------------------|-----------|---|---|---|
| Ethyl alcohol | 64-17-5 | - | - | - |
| Methyl ethyl ketone | 78-93-3 | - | Use restricted. See entry 75. (see link for restriction details) | - |
| Isopropyl alcohol | 67-63-0 | - | Use restricted. See entry 75. (see link for restriction details) | - |
| Denatonium benzoate | 3734-33-6 | - | - | - |

REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

Safety, health and environmental regulations/legislation specific for the substance or mixture

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---------------------|-----------|----------------|------------------------------|---------------------------|--|
| Ethyl alcohol | 64-17-5 | Listed | Not applicable | Not applicable | Not applicable |
| Methyl ethyl ketone | 78-93-3 | Listed | Not applicable | Not applicable | Not applicable |
| Isopropyl alcohol | 67-63-0 | Listed | Not applicable | Not applicable | Not applicable |
| Denatonium benzoate | 3734-33-6 | Not applicable | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-----------|--------|---|--|----------------------------|------------------------------------|
| | | | | | |

| | | | | | |
|---------------------|-----------|----------------|----------------|----------------|----------------|
| Ethyl alcohol | 64-17-5 | Not applicable | Not applicable | Not applicable | Annex I - Y42 |
| Methyl ethyl ketone | 78-93-3 | Not applicable | Not applicable | Not applicable | Annex I - Y42 |
| Isopropyl alcohol | 67-63-0 | Not applicable | Not applicable | Not applicable | Annex I - Y42 |
| Denatonium benzoate | 3734-33-6 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other Information

| | |
|------------------|---|
| Prepared By | Product stewardship (Regulatory Affairs) Thermo Fisher Scientific email - begel.sdsdesk@thermofisher.com |
| Creation Date | 29-Jan-2018 |
| Revision Date | 18-Dec-2025 |
| Print Date | 18-Dec-2025 |
| Revision Summary | Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024. |

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS