1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland
P.O. Box 2219
Columbus, OH 43216

Regulatory Information Number
Telephone
Emergency telephone

1-800-323-3751
614-790-3333
1-800-ASHTLAND
(1-800-274-5263)

Product name
Product code
Product Use Description

ESTER SOLVENT EEP
20920
No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: Liquid, Colorless

WARNING! COMBUSTIBLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE, OR NAUSEA. MAY CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF INHALED.

Potential Health Effects

Routes of exposure
    Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion

Eye contact
    Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact
    May cause mild skin irritation. Symptoms may include redness and burning of skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion
    Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful

Inhalation

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Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

**Aggravated Medical Condition**
Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions).

**Symptoms**
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), Weakness, Lack of coordination.

**Target Organs**
Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects.

**Carcinogenicity**
There is no information available. The chance of this material causing cancer is unknown. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**
This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Ethyl 3-ethoxypropionate has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL-3-ETHOXY PROPIONATE</td>
<td>763-69-9</td>
<td>&lt;=100%</td>
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</table>

### 4. FIRST AID MEASURES
Eyes
If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin
Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion
Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth, place individual on the left side with the head down. Contacts physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation
If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician
Hazards: No information available
Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Dry chemical, Foam, Water spray, Carbon dioxide (CO2)

Hazardous combustion products
Carbon dioxide and carbon monoxide, Hydrocarbons

Precautions for fire-fighting
If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Forms peroxides of unknown stability. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).
6. ACCIDENTAL RELEASE MEASURES

Personal precautions
For personal protection see section 8. Eliminate all ignition sources (flares, flares including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials in containers for disposal.

Environmental precautions
Prevent run-off to sewers, streams or other bodies of water. If run off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up
Absorb liquid on vermiculite, floor absorbent or other absorbent material.

7. HANDLING AND STORAGE

Handling
Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage
Store in a cool, dry, ventilated area, away from incompatible substances. Product is inhibited to avoid peroxide formation. Forms peroxides upon contact with air after inhibitor is depleted.
Exposure Guidelines

General advice
These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls
Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

Eye protection
Chemical splash goggles in compliance with OSHA regulations are advised, however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin and body protection
Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory protection
If overexposure has been determined or documented, a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators under specified conditions. (See your safety equipment supplier.) Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
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<tr>
<td>Form</td>
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<tr>
<td>Colour</td>
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<tr>
<td>Odour</td>
<td>Estar-like odor</td>
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<tr>
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<tr>
<td>Melting point/range</td>
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<tr>
<td>pH</td>
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<tr>
<td>Flash point</td>
<td>135.99 °F / 57.77 °C, Seta closed cup</td>
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<tr>
<td>Evaporation rate</td>
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</table>
10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Incompatible products

Acids, strong alkalis, Strong oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide, Hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

ETHYL-3-ETHOXY PROPIONATE

LD₅₀ Rat: 5 g/kg

Acute inhalation toxicity

ETHYL-3-ETHOXY PROPIONATE

LC₅₀ Rat: > 1000 ppm, 6 h
Acute dermal toxicity

ETHYL 3 ETHOXY PROPIONATE
LO 50 Rabbit: 9.5 g/kg

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish
No data

Acute Toxicity to Aquatic Invertebrates
No data

Environmental fate and pathways
No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods
Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs – including disposal, recycling and waste stream reduction, contact Ashland Distribution’s Environmental Services Group at 800 637 7822.

14. TRANSPORT INFORMATION

MDG
UN1993, Flammable Liquid, N.O.S. ETHYL-3 ETHOXY PROPIONATE, 3, III
TACT P: UN1993, Flammable Liquid, N.O.S. ETHYL-3 ETHOXY PROPIONATE, 3, III
TACT C: UN1993, Flammable Liquid, N.O.S. ETHYL-3 ETHOXY PROPIONATE, 3, III
CER ROADS: UN1993, Flammable Liquid, N.O.S. ETHYL-3 ETHOXY PROPIONATE, 3, III
CER RAIL: UN1993, Flammable Liquid, N.O.S. ETHYL-3 ETHOXY PROPIONATE, 3, III
CER BND TR: UN1993, Flammable Liquid, N.O.S. ETHYL-3 ETHOXY PROPIONATE, 3, III
MDG ROADS: UN1993, Flammable Liquid, N.O.S. ETHYL-3 ETHOXY PROPIONATE, 3, III
15. REGULATORY INFORMATION

California Prop. 65
WARNING! This product contains a chemical known in the State of California to cause cancer.
FORMALDEHYDE

SARA Hazard Classification
Fire Hazard
Acute Health Hazard

SARA 313 Component(s)

Reportable quantity - Product
U.S. EPA CERCLA Hazardous Substances (40 CFR 302)
500000 lbs

Reportable quantity - Components
ETHYL-3-ETHOXY PROPIONATE 763-69-9 none

HMIS

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Other</th>
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<tr>
<td>NFPA</td>
<td>1</td>
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16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).