Safety Data Sheet

This safety data sheet complies with the requirements of: 2012 OSHA Hazard Communication Standard (29CFR 1910.1200)

**Product name**  LVS AGENT

### 1. Identification

**1.1. Product Identifier**

**Product name**  LVS AGENT

**1.2. Other means of identification**

**Product code**  426961  
**Synonyms**  None  
**Chemical Family**  No information available

**1.3. Recommended use of the chemical and restrictions on use**

**Recommended use**  No information available  
**Uses advised against**  Consumer use

**1.4. Details of the Supplier of the Safety Data Sheet**

**Company Name**  Tyco Fire Protection Products  
**Address**  One Stanton Street  
**Marinette, WI 54143-2542**  
**Telephone:** 715-735-7411

**Contact point**  Product Stewardship at 1-715-735-7411  
**E-mail address**  psra@tycofp.com

**1.5. Emergency Telephone Number**

**Emergency telephone**  CHEMTREC 800-424-9300 or 703-527-3887

### 2. Hazards Identification

**Classification**

**OSHA Regulatory Status**

This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**2.2. Label Elements**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Precautionary Statements**

**2.3. Hazards Not Otherwise Classified (HNOC)**

Not Applicable.

**2.4. OTHER INFORMATION**

**Unknown Acute Toxicity**  0.58066% of the mixture consists of ingredient(s) of unknown toxicity

### 3. Composition/information on Ingredients

**Revision date**  09-Jun-2015  
**Version**  26
3.1. Mixture

The following component(s) in this product are considered hazardous under applicable OSHA(USA)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>107-21-1</td>
<td>10 - 30</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol</td>
<td>112-34-5</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

4. First aid measures

4.1. Description of first aid measures

Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact: Wash skin with soap and water. Get medical attention if irritation develops and persists.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. (Get medical attention immediately if symptoms occur.).

Ingestion: Rinse mouth. Do not induce vomiting without medical advice. If swallowed, call a poison control center or physician immediately.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms: No information available.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to physicians: Treat symptomatically.

5. Fire-fighting measures

5.1. Suitable Extinguishing Media

Product is extinguishing agent. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Unsuitable Extinguishing Media

None.

5.3. Specific Hazards Arising from the Chemical

None known.

Hazardous Combustion Products: Carbon oxides, Fluorinated oxides, Nitrogen oxides (NOx), Oxides of sulfur

5.4. Explosion Data

Sensitivity to Mechanical Impact: None.

Sensitivity to Static Discharge: None.

5.5. 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.
6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions
Ensure adequate ventilation, especially in confined areas.

For emergency responders
Use personal protection recommended in Section 8.

6.2. Environmental Precautions

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up
Pick up and transfer to properly labeled containers.

7. Handling and Storage

7.1. Precautions for Safe Handling

Advice on safe handling
Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials

8. Exposure Controls/Personal Protection

8.1. Control Parameters

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol 107-21-1</td>
<td>Ceiling: 100 mg/m³ aerosol only</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol 112-34-5</td>
<td>TWA: 10 ppm inhalable fraction and vapor</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

ACGIH (American Conference of Governmental Industrial Hygienists) OSHA (Occupational Safety and Health Administration of the US Department of Labor) NIOSH IDLH Immediately Dangerous to Life or Health

8.2. Appropriate Engineering Controls

Engineering controls
Showers
Eyewash stations
Ventilation systems.

8.3. Individual protection measures, such as personal protective equipment

Eye/Face Protection
Avoid contact with eyes. Tight sealing safety goggles.

Skin and Body Protection
Wear protective gloves and protective clothing.
Respiratory Protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Ventilation
Use local exhaust or general dilution ventilation to control exposure with applicable limits.

8.4. General hygiene considerations
Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>VALUES</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Vinegar</td>
<td></td>
</tr>
<tr>
<td>odor threshold</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>&gt; 35 °C / 95 °F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 100 °C / &gt; 212 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>flammability (solid, gas)</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flammability limit in air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Solubility in Other Solvents</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>density</td>
<td>1.2</td>
<td></td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

10.1. Chemical Stability
Stable under recommended storage conditions.

10.2. Reactivity
No data available

10.3. Possibility of hazardous reactions
None under normal processing.
hazardous polymerization

Hazardous polymerization does not occur.

10.4. Conditions to Avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible Materials


10.6. Hazardous decomposition products


11. Toxicological Information

11.1. Information on Likely Routes of Exposure

Product information  no data available

INHALATION  no data available.

Eye Contact  no data available.

Skin contact  no data available.

INGESTION  no data available.

Acute Toxicity

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol 107-21-1</td>
<td>= 4000 mg/kg (Rat)</td>
<td>= 9530 µL/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol 112-34-5</td>
<td>= 3384 mg/kg (Rat)</td>
<td>= 2700 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

11.2. Information on Toxicological Effects

Symptoms  No information available.

11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization  No information available.

Germ Cell Mutagenicity  No information available.

carcinogenicity  No information available.

Reproductive Toxicity  No information available.

STOT - Single Exposure  No information available.

STOT - Repeated Exposure  No information available.

Target organ effects  Central Nervous System, EYES, Respiratory System, skin.

Aspiration Hazard  No information available.

11.4. Numerical Measures of Toxicity - Product information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg

12. Ecological Information

12.1. ecotoxicity

Not classified

Revision date 09-Jun-2015

Version 26
0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Acetate 127-08-2</td>
<td>-</td>
<td>LC50 96 h = 6800 mg/L Oncorhyncus mykiss semi-static</td>
<td>EC50 24 h = 7170 mg/L Daphnia magna</td>
</tr>
<tr>
<td>Ethylene Glycol 107-21-1</td>
<td>EC50 96 h 6500 - 13000 mg/L Pseudokirchneriella subcapitata</td>
<td>LC50 96 h = 41000 mg/L Oncorhyncus mykiss LC50 96 h</td>
<td>EC50 48 h = 46300 mg/L Daphnia magna</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol 112-34-5</td>
<td>EC50 96 h &gt; 100 mg/L Desmodesmus subspicatus</td>
<td>LC50 96 h = 1300 mg/L Lepomis macrochirus static</td>
<td>EC50 24 h = 2850 mg/L Daphnia magna</td>
</tr>
<tr>
<td>2-Methyl-2,4-pentanediol 107-41-5</td>
<td>-</td>
<td>LC50 96 h 10500 - 11000 mg/L Pimephales promelas flow-through LC50 96 h = 8690 mg/L Pimephales promelas flow-through LC50 96 h = 10700 mg/L Pimephales promelas static</td>
<td>EC50 48 h 2700 - 3700 mg/L Daphnia magna</td>
</tr>
<tr>
<td>t-Butanol 75-65-0</td>
<td>EC50 72 h &gt; 1000 mg/L Desmodesmus subspicatus</td>
<td>LC50 96 h 6130 - 6700 mg/L Pimephales promelas flow-through</td>
<td>EC50 48 h 933 mg/L Daphnia magna</td>
</tr>
<tr>
<td>Polyethylene Glycol 25322-68-3</td>
<td>-</td>
<td>LC50 24 h &gt; 5000 mg/L Carassius auratus</td>
<td>-</td>
</tr>
</tbody>
</table>

12.2. Persistence and Degradability
No information available.

12.3. Bioaccumulation
No information available.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol 107-21-1</td>
<td>-1.93</td>
</tr>
</tbody>
</table>

12.4. Other Adverse Effects
No information available

13. Disposal Considerations

13.1. Waste Treatment Methods
Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Do not reuse container.

14. Transport Information
15. Regulatory Information

15.1. International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>IECSC</td>
<td>Does not comply</td>
</tr>
<tr>
<td>KECL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>PICCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
</tbody>
</table>

Legend:
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

15.2. US 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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol - 107-21-1</td>
<td>1.0</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol - 112-34-5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories

- Acute Health Hazard: No
- Chronic health hazard: No
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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)
Chemical name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)
--- | --- | --- | ---
Ethylene Glycol 107-21-1 | 5000 lb | - | RQ 5000 lb final RQ

15.3. US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol 107-21-1</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol 112-34-5</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>2-Methyl-2,4-pentanediol 107-41-5</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>t-Butanol 75-65-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

16. Other information, including date of preparation of the last revision

NFPA
Health Hazards 2
flammability 0
Instability 0
Physical and chemical properties -

HMIS
Health Hazards 2
flammability 1
Physical Hazards 0
Personal Protection X

Revision date 09-Jun-2015
Revision note
No information available
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 Safety Data Sheet