SAFETY DATA SHEET

1. Identification

Name of the substance or mixture (trade name) | High Temperature Couplant I-2
---|---
Product code | I-2/Q7700011
Major recommended uses for the substance or mixture | Couplant.
Specific restrictions for use of the substance or mixture | Not available.
Manufacturer/Importer/Distributor information
Supplier | Evident Scientific
Address | 48 Woerd Ave. Waltham, MA 02453, USA
Telephone | +1 781-419-3900
Emergency telephone number | CHEMTREC
US: 1-800-424-9300, International: +1 703-527-3887

2. Hazards identification

Classification of the substance or mixture
Physical hazards | Not classified.
Health hazards | Not classified.
Environmental hazards | Not classified.

GHS labeling elements, including precautionary statements
Hazard symbol(s) | None.
Signal word | None.
Hazard statement(s) | The mixture does not meet the criteria for classification.
Precautionary statement(s)
Prevention | Observe good industrial hygiene practices.
Response | Wash hands after handling.
Storage | Store away from incompatible materials.
Disposal | Dispose of waste and residues in accordance with local authority requirements.
Other hazards which do not result in classification | None known.
Supplemental information | None.

3. Composition/information on ingredients

Mixture
Common chemical name or technical name | CAS number | Concentration or concentration range
---|---|---
Lubricant | 60164-51-4 | > 90
Silicon dioxide | 7631-86-9 | < 5

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation | Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact | Rinse with water. Get medical attention if irritation develops and persists.
Ingestion | Rinse mouth. Get medical attention if symptoms occur.
Direct contact with eyes may cause temporary irritation.

Exposure to hot material may cause thermal burns. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Means of fire extinguishing

Use fire-extinguishing media appropriate for surrounding materials.

Suitable extinguishing media

None known.

Unsuitable extinguishing media

During fire, gases hazardous to health may be formed. Hydrogen fluoride.

Specific hazards arising from the chemical

Move containers from fire area if you can do so without risk.

Special fire fighting procedures

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Protective measures taken by firefighting crews

Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods

No unusual fire or explosion hazards noted.

6. Control measures for spills and leaks

Personal precautions, protective equipment and emergency procedures

Avoid prolonged exposure. Keep unnecessary personnel away. In case of spills, beware of slippery floors and surfaces. For personal protection, see section 8 of the SDS.

To be taken by those who are not involved in rendering emergency services

Keep unnecessary personnel away. Be aware of potential for surfaces to become slippery. Use personal protection recommended in Section 8 of the SDS.

To be taken by those who are involved in rendering emergency services

Avoid discharge into drains, water courses or onto the ground.

Environmental precautions

Wipe up with absorbent material (e.g. cloth, fleece). After cleaning, flush away traces with water. For waste disposal, see Section 13 of the SDS.

Methods and materials for containment and cleaning up

Avoid prolonged exposure. Do not breathe vapor from heated material. Observe good industrial hygiene practices. It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

7. Handling and storage

Avoid prolonged exposure. When necessary, use appropriate thermal protective clothing.

Precautions for safe handling

Store in original tightly closed container.

Conditions for safe storage, including any incompatibilities

Follow standard monitoring procedures.

Control parameters

No exposure limits noted for ingredient(s).

Occupational exposure limits

No biological exposure limits noted for the ingredient(s).

Biological limit values

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Appropriate engineering controls

If contact is likely, safety glasses with side shields are recommended. Eye wash fountain is recommended.

Personal protective measures

For prolonged or repeated skin contact use suitable protective gloves. Suitable gloves can be recommended by the glove supplier.

Hand protection

Wear suitable protective clothing.

Skin protection

In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

Respiratory protection

Wear appropriate thermal protective clothing, when necessary.

Thermal hazards

Wear suitable protective clothing.

Other

Wear suitable protective clothing.
Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Grease.
Color Off-white.
Odor None.
Odor threshold Not available.
pH Not available.
Melting point/freezing point -60 °F (-51.11 °C)
Initial boiling point and boiling temperature range Not available.
Flash point Non flammable.
Evaporation rate Not available.
Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.
Flammability limit - upper (%) Not available.
Explosive limit - lower (%) Not available.
Explosive limit - upper (%) Not available.

Vapor pressure < 0.001 torr (25 °C)
Vapor density > 1
Relative density 1.85
Solubility(ies) Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature > 1300 °F (> 704.44 °C)
Decomposition temperature Not available.
Viscosity 12 - 13 mPa·s

Other physical and chemical parameters

Explosive properties Not explosive.
Oxidizing properties Not oxidizing.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Conditions to avoid None known.
Incompatible materials Strong oxidizing agents.
Hazardous decomposition products In case of fire: Hydrogen fluoride.

11. Toxicological information

Information on likely routes of exposure

Inhalation Not relevant at normal room temperatures. When heated, harmful vapors may be formed.
Skin contact No adverse effects due to skin contact are expected.
Eye contact Direct contact with eyes may cause temporary irritation.
Ingestion No adverse effects due to ingestion are expected.
Symptoms Direct contact with eyes may cause temporary irritation.
Acute toxicity

Expected to be a low ingestion hazard.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Temperature Couplant I-2 (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALD</td>
<td>Rabbit</td>
<td>&gt; 17000 mg/kg</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 30000 mg/kg</td>
</tr>
<tr>
<td><strong>Skin irritation and corrosion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No adverse effects due to skin contact are expected.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/eye irritation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct contact with eyes may cause temporary irritation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory sensitization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to lack of data the classification is not possible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skin sensitization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This product is not expected to cause skin sensitization.</td>
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<td></td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td></td>
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<tr>
<td>No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Carcinogenicity</strong></td>
<td></td>
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</tr>
<tr>
<td>This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Toxic to reproduction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to lack of data the classification is not possible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - single exposure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to lack of data the classification is not possible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - repeated exposure</strong></td>
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<td></td>
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<tr>
<td>Due to lack of data the classification is not possible.</td>
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<td></td>
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<tr>
<td><strong>Aspiration hazard</strong></td>
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<tr>
<td>Not an aspiration hazard.</td>
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</tbody>
</table>

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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<tr>
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</thead>
<tbody>
<tr>
<td>High Temperature Couplant I-2 (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
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<tr>
<td>Fish</td>
<td>Oncorhynchus mykiss</td>
<td>&gt; 1000 mg/l</td>
</tr>
<tr>
<td><strong>Persistence and degradability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No data is available on the degradability of this product.</td>
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<td></td>
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<tr>
<td><strong>Bioaccumulative potential</strong></td>
<td></td>
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<tr>
<td>The product is not expected to bioaccumulate.</td>
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<tr>
<td><strong>Partition coefficient n-octanol / water (log Kow)</strong></td>
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<tr>
<td>Not available.</td>
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<tr>
<td><strong>Bioconcentration factor (BCF)</strong></td>
<td></td>
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<tr>
<td>Not available.</td>
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<tr>
<td><strong>Mobility in soil</strong></td>
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<tr>
<td>No data available for this product.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other adverse effects</strong></td>
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<tr>
<td>No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.</td>
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</tr>
</tbody>
</table>

13. Considerations on final disposal

Recommended methods for final destination

- **Residual waste**: Dispose of in accordance with local regulations.
- **Contaminated packaging**: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
- **Local disposal regulations**: Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

14. Transport information

National regulations

- ANTT: Not regulated as dangerous goods.

International regulations

- IATA: Not regulated as dangerous goods.
IMDG  
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
Not applicable.

15. Regulatory information

Federal regulations

International regulations

Montreal Protocol  
Not applicable.

Stockholm Convention  
Not applicable.

Rotterdam Convention  
Not applicable.

Kyoto protocol  
Not applicable.

Basel Convention  
Not applicable.

16. Other information

Significant information, yet not specifically related to the previous sections  
Not available.

Legends and abbreviations

LD50: Lethal Dose 50%.

Disclaimer

Evident Scientific cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.