SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name: InsulGrip™ Adhesive

Manufacturer or supplier's details
Company: Johns Manville
Address: P.O. Box 5108
          Denver, CO USA 80127
Telephone: +1 303-978-2000 8:00 a.m.-5:00 p.m. M-F
Emergency telephone number: 1-800-424-9300 (Chemtrec, in English)

Recommended use of the chemical and restrictions on use
Recommended use: Adhesives
Restrictions on use: For professional users only.
Prepared by: productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Skin irritation: Category 2
Eye irritation: Category 2A

GHS label elements
Hazard pictograms: !

Signal word: Warning
Hazard statements: H315 Causes skin irritation.
                  H319 Causes serious eye irritation.
Precautionary statements: Prevention:
                          P264 Wash skin thoroughly after handling.
                          P280 Wear protective gloves/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy
to do. Continue rinsing.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>urea</td>
<td>57-13-6</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>triethanolamine</td>
<td>102-71-6</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>methanol</td>
<td>67-56-1</td>
<td>&gt;= 0.1 - &lt; 1</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice
Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled
Remove person to fresh air. If signs/symptoms continue, get medical attention.
If breathing has stopped, apply artificial respiration.

In case of skin contact
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Call a physician if irritation develops or persists.

In case of eye contact
Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
If easy to do, remove contact lens, if worn.
Keep eye wide open while rinsing.
Protect unharmed eye.

If swallowed
Do NOT induce vomiting.
Gently wipe or rinse the inside of the mouth with water.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed
None known.

SECTION 5. FIREFIGHTING MEASURES

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

Unsuitable extinguishing media
High volume water jet
SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment.

Environmental precautions: Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Advice on safe handling: Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. Perishable if frozen. Electrical installations / working materials must comply with the technological safety standards.

Recommended storage temperature: 5 - 48 °C

Storage period: 12 Months

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Personal protective equipment

#### Hand protection

**Material**: Protective gloves

**Remarks**: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

#### Eye protection

- Tightly fitting safety goggles
- Safety glasses with side-shields
- Wear face-shield and protective suit for abnormal processing problems.

#### Skin and body protection

- Impervious clothing
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.
- When using do not eat or drink.
- When using do not smoke.
- Wash hands before breaks and at the end of workday.
- Written instructions for handling must be available at the work place.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>liquid</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>light brown</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>amine-like</td>
</tr>
<tr>
<td><strong>Odour Threshold</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>6.5 - 7.5</td>
</tr>
<tr>
<td><strong>Melting point/range</strong></td>
<td>-2.2 °C</td>
</tr>
<tr>
<td><strong>Boiling point/boiling range</strong></td>
<td>not determined</td>
</tr>
</tbody>
</table>
### InsulGrip Adhesive

**Version 2.2**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>&gt; 94 °C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.12 g/cm³</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>1,700 mPa.s (21 °C)</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>1518 mm²/s (21 °C)</td>
</tr>
</tbody>
</table>

### SECTION 10. STABILITY AND REACTIVITY

- **Reactivity**: None reasonably foreseeable.
- **Chemical stability**: Stable under normal conditions.
- **Possibility of hazardous reactions**: No dangerous reaction known under conditions of normal use. No decomposition if stored and applied as directed.
- **Conditions to avoid**: Protect from frost.
- **Incompatible materials**: Strong oxidizing agents
- **Hazardous decomposition products**: In case of fire hazardous decomposition products may be produced such as: Ammonia, carbon oxides, nitrogen oxides.
SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:
Acute oral toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity: Acute toxicity estimate: > 200 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute toxicity

Components:
urea:
Acute oral toxicity: LD50 (Rat): 8,471 mg/kg

Acute toxicity

triethanolamine:
Acute oral toxicity: LD50 (Rat, male and female): ca. 7,200 mg/kg
Acute dermal toxicity: LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402

Acute toxicity

methanol:
Acute oral toxicity: LDLo (Humans): 143 mg/kg
LD50 (Rat): 1,187 - 2,769 mg/kg
Acute inhalation toxicity: LC50 (Rat): 128.2 mg/l
Exposure time: 4 h
LC50 (Rat): 87.6 mg/l
Exposure time: 6 h
Acute dermal toxicity: LD50 (Rabbit): 17,100 mg/kg

Skin corrosion/irritation

Product:
Remarks: May cause skin irritation in susceptible persons.

Skin corrosion/irritation

Components:
methanol:
Species: Rabbit
(Result: No skin irritation)

Serious eye damage/eye irritation

**Product:**
Remarks: Contact with eyes may cause irritation.

Serious eye damage/eye irritation

**Components:**
- **methanol:**
  - Species: Rabbit
  - Result: No eye irritation

Respiratory or skin sensitisation

**Components:**
- **methanol:**
  - Test Type: Maximisation Test
  - Exposure routes: Dermal
  - Species: Guinea pig
  - Method: OECD Test Guideline 406
  - Result: Does not cause skin sensitisation.

IARC
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

STOT - single exposure

**Components:**
- **methanol:**
  - Assessment: Causes damage to organs.

Further information

**Product:**
Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION
**Ecotoxicity**

**Components:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>urea</td>
<td>LC50 (Poecilia reticulata (guppy)): 17,500 mg/l</td>
<td>EC50 (Daphnia magna (Water flea)): 3,910 mg/l</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 96 h</td>
<td>Exposure time: 48 h</td>
</tr>
</tbody>
</table>

**triethanolamine:**

- **Toxicity to fish**
  - LC50 (Pimephales promelas (fathead minnow)): 11,800 mg/l
  - Exposure time: 96 h
  - Test Type: flow-through test
- **Toxicity to daphnia and other aquatic invertebrates**
  - EC50 (Daphnia magna (Water flea)): 2,038 mg/l
  - Exposure time: 24 h
- **Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**
  - NOEC (Daphnia magna (Water flea)): 16 mg/l
  - Exposure time: 21 d
  - Test Type: semi-static test

**Persistence and degradability**

**Components:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>triethanolamine</td>
<td>Result: Readily biodegradable.</td>
</tr>
</tbody>
</table>

**Bioaccumulative potential**

**Components:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Partition coefficient: n-octanol/water</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>urea</td>
<td>-2.59 - -1.59</td>
<td></td>
</tr>
</tbody>
</table>

**triethanolamine:**

- Partition coefficient: n-octanol/water: log Pow: -2.3 (20 °C)
- Method: OECD Test Guideline 107

**methanol:**

- Partition coefficient: n-octanol/water: log Pow: -0.77

**Mobility in soil**

No data available

**Other adverse effects**

**Product:**

- Ozone-Depletion Potential: Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I
Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Disposal of residual product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations
These products are not classified as dangerous goods according to international transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list
TSCA - 5(a) Significant New Use Rule List of Chemicals : No substances are subject to a Significant New Use Rule.

U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D) : No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>methanol</td>
<td>67-56-1</td>
<td>5000</td>
<td>*</td>
</tr>
<tr>
<td>methanol</td>
<td>67-56-1</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
</table>
SAFETY DATA SHEET
200000002912

InsulGrip Adhesive

Version 2.2
Revision Date 10/23/2017
Print Date 10/23/2017

| formaldehyde | 50-00-0 | 100 | * |

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards: Acute Health Hazard

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

- urea 57-13-6
- triethanolamine 102-71-6

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

methanol 67-56-1

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

formaldehyde 50-00-0

The components of this product are reported in the following inventories:

TSCA: On the inventory, or in compliance with the inventory

DSL: On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Further information
Revision Date: 10/23/2017

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.