## 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>PLEXUS® H4110 Adhesive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>None.</td>
</tr>
<tr>
<td>Recommended use</td>
<td>Not available.</td>
</tr>
<tr>
<td>Recommended restrictions</td>
<td>None known.</td>
</tr>
</tbody>
</table>

**Manufacturer/Importer/Supplier/Distributor information**

<table>
<thead>
<tr>
<th>Company name</th>
<th>ITW Performance Polymers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>35 Brownridge Rd</td>
</tr>
<tr>
<td></td>
<td>Unit 1</td>
</tr>
<tr>
<td></td>
<td>Halton Hills, ON L7G 0C6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact person</th>
<th>Customer Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone number</td>
<td>978-777-1100</td>
</tr>
<tr>
<td>Fax</td>
<td></td>
</tr>
<tr>
<td>E-mail</td>
<td></td>
</tr>
<tr>
<td>Emergency telephone number</td>
<td>800-424-9300</td>
</tr>
<tr>
<td>Supplier</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

## 2. Hazard identification

### Physical hazards

- Not classified.

### Health hazards

#### Acute toxicity, oral
- Category 4

#### Skin corrosion/irritation
- Category 1

#### Serious eye damage/eye irritation
- Category 1

#### Sensitization, skin
- Category 1A

### Environmental hazards

- Not classified.

**Label elements**

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger</td>
<td>Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage.</td>
</tr>
</tbody>
</table>

**Precautionary statement**

#### Prevention

- Do not breathe mist/vapours. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

#### Response

- IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

#### Storage

- Store locked up.

#### Disposal

- Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

- None known.
4% of the mixture consists of component(s) of unknown acute oral toxicity. 2% of the mixture consists of component(s) of unknown acute dermal toxicity. 30.5% of the mixture consists of component(s) of unknown acute inhalation toxicity. 24% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 24% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. Composition/information on ingredients

#### Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4,6-tris-(dimethylaminomethyl)-phenol</td>
<td></td>
<td>90-72-2</td>
<td>&lt; 20</td>
</tr>
<tr>
<td>ISOPHORONE DIAMINE</td>
<td></td>
<td>2855-13-2</td>
<td>7 - 10</td>
</tr>
<tr>
<td>TRIMETHOXYVINYLSDILANE</td>
<td></td>
<td>2768-02-7</td>
<td>1 - &lt; 3</td>
</tr>
<tr>
<td>Bis(dimethylamino)methylphenol</td>
<td></td>
<td>71074-89-0</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>N-.BETA.-AMINOETHYL).GAMMA.-AMINOPROPYLTRIMETHOXY SILANE</td>
<td></td>
<td>1760-24-3</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

Other components below reportable levels: 60 - 100

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

Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

#### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

#### Ingestion

Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

#### Most important symptoms/effects, acute and delayed

Burnning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

#### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

#### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

#### Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

#### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

#### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions for firefighters

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

#### Fire fighting equipment/instructions

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

#### Specific methods

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

#### General fire hazards

No unusual fire or explosion hazards noted.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not breathe mist/vapours. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIMETHOXYVINYLSILANE E (CAS 2768-02-7)</td>
<td>STEL</td>
<td>60 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values

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

Appropriate engineering controls

Good general ventilation 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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.

Skin protection
Hand protection
Wear appropriate chemical resistant gloves.

Other
Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep away from food and drink. 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance
Physical state
Liquid.

Form
Liquid.

Colour
White.

Odour
Slight.

Odour threshold
Not available.

pH
Not available.

Melting point/freezing point
10 °C (50 °F) estimated

Initial boiling point and boiling range
247 °C (476.6 °F) estimated

Flash point
> 200.0 °C (> 392.0 °F)

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.

#### Vapour pressure
- 0.01 hPa estimated

#### Vapour density
- Not available.

#### Relative density
- Not available.

#### Solubility(ies)
- **Solubility (water)**
  - Not available.
- **Partition coefficient (n-octanol/water)**
  - Not available.

#### Auto-ignition temperature
- Not available.

#### Decomposition temperature
- Not available.

#### Viscosity
- Not available.

#### Other information
- **Density**
  - 1.02 g/cm³
- **Exhaustible properties**
  - Not explosive.
- **Flammability class**
  - Combustible IIIB estimated
- **Oxidising properties**
  - Not oxidising.
- **Specific gravity**
  - 1.02

### 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 | Contact with incompatible materials. |
| Incompatible materials | Peroxides. Phenols. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

### 11. Toxicological information

#### Information on likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>May cause irritation to the respiratory system.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Causes severe skin burns. May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Causes digestive tract burns. Harmful if swallowed.</td>
</tr>
</tbody>
</table>

| Symptoms related to the physical, chemical and toxicological characteristics | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. |

#### Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Causes serious eye damage.</td>
</tr>
</tbody>
</table>

#### Respiratory or skin sensitisation

<table>
<thead>
<tr>
<th>Sensitisation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory sensitisation</td>
<td>Due to partial or complete lack of data the classification is not possible.</td>
</tr>
<tr>
<td>Skin sensitisation</td>
<td>May cause an allergic skin reaction.</td>
</tr>
</tbody>
</table>
Germline mutagenicity: Due to partial or complete lack of data the classification is not possible.

Carcinogenicity: Due to partial or complete lack of data the classification is not possible.

Reproductive toxicity: Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - single exposure: Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure: Due to partial or complete lack of data the classification is not possible.

Aspiration hazard: Due to partial or complete lack of data the classification is not possible.

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.

Persistence and degradability: No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

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.

14. Transport information

TDG

UN number: UN2735
UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S., Limited Quantity
Transport hazard class(es):
- Class: 8
- Subsidiary risk: -
- Packing group: III
- Environmental hazards: Not available.
- Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number: UN2735
UN proper shipping name: Amines, liquid, corrosive, n.o.s. (ISOPHORONE DIAMINE), Limited Quantity
Transport hazard class(es):
- Class: 8
- Subsidiary risk: -
- Packing group: III
- Environmental hazards: No.
- ERG Code: 8L
- Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
- Other information:
  - Passenger and cargo aircraft: Allowed with restrictions.
  - Cargo aircraft only: Allowed with restrictions.

IMDG

UN number: UN2735
UN proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONE DIAMINE), Limited Quantity
Transport hazard class(es)

Class 8
Subsidiary risk -
Packing group III
Environmental hazards
  Marine pollutant No.
EmS F-A, S-B

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.
Not established.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IATA

IMDG; TDG

15. Regulatory information

Canadian regulations
This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act
Not regulated.

Export Control List (CEPA 1999, Schedule 3)
Not listed.

Greenhouse Gases
Not listed.

Precursor Control Regulations
Not regulated.

International regulations
Stockholm Convention
Not applicable.
Rotterdam Convention
Not applicable.
Kyoto Protocol
Not applicable.
Montreal Protocol
Not applicable.
Basel Convention
Not applicable.
### International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### 16. Other information

**Issue date**  
24-January-2020

**Revision date**  
26-March-2020

**Version No.**  
03

**Disclaimer**  
ITW Performance Polymers 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 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 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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.
## SAFETY DATA SHEET

### 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>PLEXUS® H4110 Activator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>None.</td>
</tr>
<tr>
<td>Recommended use</td>
<td>Not available.</td>
</tr>
<tr>
<td>Recommended restrictions</td>
<td>None known.</td>
</tr>
</tbody>
</table>

**Manufacturer/Importer/Supplier/Distributor information**

- **Company name**: ITW Performance Polymers
- **Address**: 35 Brownridge Rd, Unit 1, Halton Hills, ON L7G 0C6
- **Contact person**: Customer Service
- **Telephone number**: 978-777-1100
- **Emergency telephone number**: 800-424-9300

### 2. Hazard identification

#### Physical hazards
- Not classified.

#### Health hazards
- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 2A
- Sensitization, skin: Category 1

#### Environmental hazards
- Hazardous to the aquatic environment, acute hazard: Category 3
- Hazardous to the aquatic environment, long-term hazard: Category 2

**Label elements**

#### Signal word
- Warning

#### Hazard statement
- Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

#### Precautionary statement

- **Prevention**: Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.
- **Response**: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage.
- **Storage**: Store away from incompatible materials.
- **Disposal**: Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Other hazards
- None known.
Supplemental information: 52% of the mixture consists of component(s) of unknown acute oral toxicity. 52% of the mixture consists of component(s) of unknown acute dermal toxicity. 52% of the mixture consists of component(s) of unknown acute inhalation toxicity. 52% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 2% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Epoxy resin:--reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)</td>
<td>Epoxy resin</td>
<td>25068-38-6</td>
<td>40 - 70</td>
</tr>
<tr>
<td></td>
<td>3-(trimethoxysilyl)propyl Glycidyl Ether</td>
<td></td>
<td>2530-83-8</td>
<td>1 - 5</td>
</tr>
<tr>
<td></td>
<td>DIBUTYL Tin DIACETATE</td>
<td></td>
<td>1067-33-0</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td></td>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>30 - 60</td>
</tr>
</tbody>
</table>

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
Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

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

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up

Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIBUTYL Tin Diacetate (CAS 1067-33-0)</td>
<td>STEL</td>
<td>0.2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBUTYL Tin Diacetate (CAS 1067-33-0)</td>
<td>STEL</td>
<td>0.2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBUTYL Tin Diacetate (CAS 1067-33-0)</td>
<td>STEL</td>
<td>0.2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBUTYL Tin Diacetate (CAS 1067-33-0)</td>
<td>STEL</td>
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</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBUTYL Tin Diacetate (CAS 1067-33-0)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBUTYL Tin Diacetate (CAS 1067-33-0)</td>
<td>STEL</td>
<td>0.2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>
Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIBUTYLTIN DIACETATE (CAS 1067-33-0)</td>
<td>15 minute</td>
<td>0.2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>8 hour</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values: No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Canada - Alberta OELs: Skin designation
DIBUTYLTIN DIACETATE (CAS 1067-33-0) Can be absorbed through the skin.

Canada - British Columbia OELs: Skin designation
DIBUTYLTIN DIACETATE (CAS 1067-33-0) Can be absorbed through the skin.

Canada - Manitoba OELs: Skin designation
DIBUTYLTIN DIACETATE (CAS 1067-33-0) Can be absorbed through the skin.

Canada - Ontario OELs: Skin designation
DIBUTYLTIN DIACETATE (CAS 1067-33-0) Can be absorbed through the skin.

Canada - Quebec OELs: Skin designation
DIBUTYLTIN DIACETATE (CAS 1067-33-0) Can be absorbed through the skin.

Canada - Saskatchewan OELs: Skin designation
DIBUTYLTIN DIACETATE (CAS 1067-33-0) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation
DIBUTYLTIN DIACETATE (CAS 1067-33-0) Can be absorbed through the skin.

Appropriate engineering controls
Good general ventilation 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. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles). Face shield is recommended.

Skin protection
Hand protection
Wear appropriate chemical resistant gloves.

Other
Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance
Liquid.

Physical state
Liquid.

Form
Liquid.

Colour
Dark grey

Odour
Slight.

Odour threshold
Not available.

pH
Not available.

Melting point/freezing point
Not available.

Initial boiling point and boiling range
Not available.

Flash point
> 200.0 °C (> 392.0 °F)

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. |

| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | Not available. |

| Solubility(ies) | Not available. |
| Solubility (water) | Not available. |

| Partition coefficient (n-octanol/water) | Not available. |

| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |

| Viscosity | Not available. |

### Other information

| Density | 1.55 g/cm³ |
| Explosive properties | Not explosive. |
| Flammability class | Combustible IIIB estimated |
| Oxidising properties | Not oxidising. |
| Specific gravity | 1.55 |

### 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 | Contact with incompatible materials. |
| Incompatible materials | Strong oxidising agents. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

### 11. Toxicological information

#### Information on likely routes of exposure

- **Inhalation**: Knowledge about health hazard is incomplete.
- **Skin contact**: Causes skin irritation. May cause an allergic skin reaction.
- **Eye contact**: Causes serious eye irritation.
- **Ingestion**: Knowledge about health hazard is incomplete.

#### Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

#### Information on toxicological effects

| Acute toxicity | Not known. |

### Components

<table>
<thead>
<tr>
<th><strong>Species</strong></th>
<th><strong>Test Results</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
<td><strong>LD50</strong></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**: Causes skin irritation.
Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Due to partial or complete lack of data the classification is not possible.

Respiratory sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Due to partial or complete lack of data the classification is not possible.

Carcinogenicity

Due to partial or complete lack of data the classification is not possible.

ACGIH Carcinogens

DIBUTYL Tin DIACETATE (CAS 1067-33-0) A4 Not classifiable as a human carcinogen.

Canada - Manitoba OELs: carcinogenicity

DIBUTYL Tin DIACETATE (CAS 1067-33-0) Not classifiable as a human carcinogen.

Reproductive toxicity

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - single exposure

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard

Due to partial or complete lack of data the classification is not possible.

12. Ecological information

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

 Partition coefficient n-octanol / water (log Kow)

DIBUTYL Tin DIACETATE 1.27

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

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.

14. Transport information

TDG

Not regulated as dangerous goods.

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 established.

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.
Controlled Drugs and Substances Act
Not regulated.
Export Control List (CEPA 1999, Schedule 3)
Not listed.
Greenhouse Gases
Not listed.
Precursor Control Regulations
Not regulated.

International regulations
Stockholm Convention
Not applicable.
Rotterdam Convention
Not applicable.
Kyoto Protocol
Not applicable.
Montreal Protocol
Not applicable.
Basel Convention
Not applicable.

International Inventories
<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date: 24-January-2020
Version No.: 01

Disclaimer
ITW Performance Polymers 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 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 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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.