# SAFETY DATA SHEET

| 1. Identification              |   |   |  |
|--------------------------------|---|---|--|
| Product identifier             | PLEXUS® MA8105 Adhesive   |   |  |
| Other means of identification  | None.   |   |  |
| Recommended use                | Not available.  |   |  |
| Recommended restrictions       | None known.   |   |  |
| 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  |   |  |
| Fax                            |   |   |  |
| E-mail                         |   |   |  |
| Emergency telephone<br>number  | 800-424-9300  |   |  |
| Supplier                       | Not available.  |   |  |
| 2. Hazard identification       |   |   |  |
| Physical hazards               | Flammable liquids   | Category 2  |  |
| Health hazards                 | Acute toxicity, dermal  | Category 4  |  |
|                                | Acute toxicity, inhalation  | Category 4  |  |
|                                | Skin corrosion/irritation   | Category 1A   |  |
|                                | Serious eye damage/eye irritation   | Category 1  |  |
|                                | Sensitization, skin   | Category 1A   |  |
| Environmental hazards          | Not classified.   |   |  |
| Label elements                 |   |   |  |
|                                |   |   |  |
| Signal word                    | Danger  |   |  |
| Hazard statement               |   | l in contact with skin. Causes severe skin burns and ction. Causes serious eye damage. Harmful if |  |
| Precautionary statement        |   |   |  |
| Prevention                     | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>Keep container tightly closed. Ground and bond container and receiving equipment. Use<br>explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to<br>prevent static discharges. Do not breathe mist/vapours. Wash thoroughly after handling. Use only<br>outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the<br>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. In case of fire: Use appropriate media to extinguish.            |   |  |

StorageStore in a well-ventilated place. Keep cool. Store locked up.DisposalDispose of contents/container in accordance with local/regional/national/international regulations.Other hazardsStatic accumulating flammable liquid can become electrostatically charged even in bonded and<br/>grounded equipment. Sparks may ignite liquid and vapour. May cause flash fire or explosion.Supplemental information33 % of the mixture consists of component(s) of unknown acute oral toxicity. 74.85 % of the

mixture consists of component(s) of unknown acute dermal toxicity. 73.43 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 79.18 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

## 3. Composition/information on ingredients

| ixtures                               |                          |            |           |
|---------------------------------------|--------------------------|------------|-----------|
| Chemical name                         | Common name and synonyms | CAS number | %         |
| Methyl methacrylate                   |                          | 80-62-6    | 30 - 60   |
| Methacrylic acid                      |                          | 79-41-4    | 7 - 13    |
| 2-PHENOXYETHYL<br>METHACRYLATE        |                          | 10595-06-9 | 3 - 7     |
| Lauryl methacrylate                   |                          | 142-90-5   | 1 - 5     |
| Maleic acid                           |                          | 110-16-7   | 1 - 5     |
| TERT-BUTYL PERBENZOATE                |                          | 614-45-9   | 1 - 5     |
| TRIMETHYLOLPROPANE<br>TRIMETHACRYLATE |                          | 3290-92-4  | 1 - 5     |
| HEXADECYL METHACRYLATE                |                          | 2495-27-4  | 0.5 - 1.5 |
| Paraffin wax                          |                          | 8002-74-2  | 0.5 - 1.5 |
| BUTYLATED HYDROXYTOLUENE<br>(BHT)     |                          | 128-37-0   | 0.1 - 1   |
| P-BENZOQUINONE                        |                          | 106-51-4   | 0.1 - 1   |
| Other components below reportable     | levels                   |            | 30 - 60   |

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

| 4. First-aid measures  |   |
|--|---|
| Inhalation   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison centre or doctor/physician if you feel unwell.   |
| 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<br>vomiting occurs, keep head low so that stomach content doesn't get into the lungs.  |
| Most important<br>symptoms/effects, acute and<br>delayed                     | 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.   |
| Indication of immediate<br>medical attention and special<br>treatment needed | Provide general supportive measures and treat symptomatically. Thermal 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. 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  | Take off all contaminated clothing immediately. 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. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.   |
| Unsuitable extinguishing media   | Do not use water jet as an extinguisher, as this will spread the fire.  |

| Specific hazards arising from the chemical                                | Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. 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<br>equipment/instructions                                   | In case of fire and/or explosion do not breathe fumes. 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  | Highly flammable liquid and vapour.  |
| 6. Accidental release mea   | sures  |
| Personal precautions,<br>protective equipment and<br>emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.  |
| Methods and materials for<br>containment and cleaning up                  | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.  |
|   | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.   |
|   | Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. 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.<br>Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to<br>avoid environmental contamination.   |
| 7. Handling and storage   |  |
| Precautions for safe handling   | Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist/vapours. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. |
|   | For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".   |
| Conditions for safe storage,<br>including any incompatibilities           | Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).  |

## 8. Exposure controls/personal protection

#### Occupational exposure limits

### US. ACGIH Threshold Limit Values

| Components  | Туре | Value   | Form                           |
|---|------|---------|--------------------------------|
| BUTYLATED<br>HYDROXYTOLUENE (BHT)<br>(CAS 128-37-0) | TWA  | 2 mg/m3 | Inhalable fraction and vapour. |
| METHACRYLIC ACID (CAS<br>79-41-4)                   | TWA  | 20 ppm  |                                |
| METHYL METHACRYLATE<br>(CAS 80-62-6)                | STEL | 100 ppm |                                |
|   | TWA  | 50 ppm  |                                |
| Paraffin wax (CAS<br>8002-74-2)                     | TWA  | 2 mg/m3 | Fume.                          |
| P-BENZOQUINONE (CAS<br>106-51-4)                    | TWA  | 0.1 ppm |                                |

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

| Components  | Туре | Value     | Form  |
|---|------|-----------|-------|
| BUTYLATED<br>HYDROXYTOLUENE (BHT)<br>(CAS 128-37-0) | TWA  | 10 mg/m3  |       |
| METHACRYLIC ACID (CAS<br>79-41-4)                   | TWA  | 70 mg/m3  |       |
|   |      | 20 ppm    |       |
| METHYL METHACRYLATE<br>(CAS 80-62-6)                | STEL | 410 mg/m3 |       |
|   |      | 100 ppm   |       |
|   | TWA  | 205 mg/m3 |       |
|   |      | 50 ppm    |       |
| Paraffin wax (CAS<br>8002-74-2)                     | TWA  | 2 mg/m3   | Fume. |
| P-BENZOQUINONE (CAS<br>106-51-4)                    | TWA  | 0.4 mg/m3 |       |
|   |      | 0.1 ppm   |       |

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

| Components  | Туре | Value   | Form                          |
|---|------|---------|-------------------------------|
| BUTYLATED<br>HYDROXYTOLUENE (BHT)<br>(CAS 128-37-0) | TWA  | 2 mg/m3 | Vapor and aerosol, inhalable. |
| METHACRYLIC ACID (CAS<br>79-41-4)                   | TWA  | 20 ppm  |                               |
| METHYL METHACRYLATE<br>(CAS 80-62-6)                | STEL | 100 ppm |                               |
|   | TWA  | 50 ppm  |                               |
| Paraffin wax (CAS<br>8002-74-2)                     | TWA  | 2 mg/m3 | Fume.                         |
| P-BENZOQUINONE (CAS<br>106-51-4)                    | TWA  | 0.1 ppm |                               |

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

| Components  | Туре | Value   | Form                           |
|---|------|---------|--------------------------------|
| BUTYLATED<br>HYDROXYTOLUENE (BHT)<br>(CAS 128-37-0) | TWA  | 2 mg/m3 | Inhalable fraction and vapour. |
| METHACRYLIC ACID (CAS<br>79-41-4)                   | TWA  | 20 ppm  |                                |

| Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) |      |         |       |  |
|--|------|---------|-------|--|
| Components   | Туре | Value   | Form  |  |
| METHYL METHACRYLATE<br>(CAS 80-62-6)                                       | STEL | 100 ppm |       |  |
|  | TWA  | 50 ppm  |       |  |
| Paraffin wax (CAS<br>8002-74-2)  | TWA  | 2 mg/m3 | Fume. |  |
| P-BENZOQUINONE (CAS<br>106-51-4)   | TWA  | 0.1 ppm |       |  |

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

| Components  | Туре | Value   | Form                           |
|---|------|---------|--------------------------------|
| BUTYLATED<br>HYDROXYTOLUENE (BHT)<br>(CAS 128-37-0) | TWA  | 2 mg/m3 | Inhalable fraction and vapour. |
| METHACRYLIC ACID (CAS<br>79-41-4)                   | TWA  | 20 ppm  |                                |
| METHYL METHACRYLATE<br>(CAS 80-62-6)                | STEL | 100 ppm |                                |
|   | TWA  | 50 ppm  |                                |
| Paraffin wax (CAS<br>8002-74-2)                     | TWA  | 2 mg/m3 | Fume.                          |
| P-BENZOQUINONE (CAS<br>106-51-4)                    | TWA  | 0.1 ppm |                                |

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

| Components  | Туре | Value      | Form  |
|---|------|------------|-------|
| BUTYLATED<br>HYDROXYTOLUENE (BHT)<br>(CAS 128-37-0) | TWA  | 10 mg/m3   |       |
| METHACRYLIC ACID (CAS<br>79-41-4)                   | TWA  | 70 mg/m3   |       |
|   |      | 20 ppm     |       |
| METHYL METHACRYLATE<br>(CAS 80-62-6)                | TWA  | 205 mg/m3  |       |
|   |      | 50 ppm     |       |
| Paraffin wax (CAS<br>8002-74-2)                     | TWA  | 2 mg/m3    | Fume. |
| P-BENZOQUINONE (CAS<br>106-51-4)                    | TWA  | 0.44 mg/m3 |       |
|   |      | 0.1 ppm    |       |

#### Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) Components Value

| Components  | Туре      | Value   | Form                           |
|---|-----------|---------|--------------------------------|
| BUTYLATED<br>HYDROXYTOLUENE (BHT)<br>(CAS 128-37-0) | 15 minute | 4 mg/m3 | Inhalable fraction and vapour. |
|   | 8 hour    | 2 mg/m3 | Inhalable fraction and vapour. |
| METHACRYLIC ACID (CAS<br>79-41-4)                   | 15 minute | 30 ppm  |                                |
|   | 8 hour    | 20 ppm  |                                |
| METHYL METHACRYLATE<br>(CAS 80-62-6)                | 15 minute | 100 ppm |                                |
|   | 8 hour    | 50 ppm  |                                |
| Paraffin wax (CAS<br>8002-74-2)                     | 15 minute | 4 mg/m3 | Fume.                          |
|   | 8 hour    | 2 mg/m3 | Fume.                          |

| Components                          | Туре   | Value                         | Form                      |
|-------------------------------------|--|-------------------------------|---------------------------|
| P-BENZOQUINONE (CAS<br>106-51-4)    | 15 minute  | 0.3 ppm                       |                           |
|                                     | 8 hour   | 0.1 ppm                       |                           |
| Biological limit values             | No biological exposure limits noted for  | the ingredient(s).            |                           |
| Appropriate engineering<br>controls | Explosion-proof general and local exhaust ventilation. Good general ventilation should be used.<br>Ventilation rates should be matched to conditions. If applicable, use process enclosures, local<br>exhaust ventilation, or other engineering controls to maintain airborne levels below recommended<br>exposure limits. If exposure limits have not been established, maintain airborne levels to an<br>acceptable level. Eye wash facilities and emergency shower must be available when handling this<br>product. |                               |                           |
| Individual protection measures      | , such as personal protective equipme  | ent                           |                           |
| Eye/face protection                 | Wear safety glasses with side shields recommended.   | (or goggles) and a face shiel | d. Face shield is         |
| Skin protection                     |  |                               |                           |
| Hand protection                     | Wear appropriate chemical resistant g  | loves.                        |                           |
| Other                               | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.   |                               |                           |
| Respiratory protection              | If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.  |                               |                           |
| Thermal hazards                     | Wear appropriate thermal protective c  | lothing, when necessary.      |                           |
| General hygiene<br>considerations   | When using do not smoke. Always ob-<br>after handling the material and before<br>clothing and protective equipment to re<br>be allowed out of the workplace.   | eating, drinking, and/or smol | king. Routinely wash work |

## 9. Physical and chemical properties

| -                                       |                               |
|---|-------------------------------|
| Appearance                              |                               |
| Physical state                          | Liquid.                       |
| Form                                    | Liquid.                       |
| Colour                                  | Not available.                |
| Odour                                   | Not available.                |
| Odour threshold                         | Not available.                |
| рН                                      | Not available.                |
| Melting point/freezing point            | -48 °C (-54.4 °F) estimated   |
| Initial boiling point and boiling range | 100.5 °C (212.9 °F) estimated |
| Flash point                             | 10.0 °C (50.0 °F) estimated   |
| Evaporation rate                        | Not available.                |
| Flammability (solid, gas)               | Not applicable.               |
| Upper/lower flammability or exp         | losive limits                 |
| Flammability limit - lower<br>(%)       | 2.1 % estimated               |
| Flammability limit - upper<br>(%)       | 12.5 % estimated              |
| Explosive limit - lower ( %)            | Not available.                |
| Explosive limit – upper<br>(%)          | Not available.                |
| Vapour pressure                         | 37.7 hPa estimated            |
| Vapour density                          | Not available.                |
| Relative density                        | Not available.                |
| Solubility(ies)                         |                               |
| Solubility (water)                      | Not available.                |
|   |                               |

| Partition coefficient<br>(n-octanol/water) | Not available.   |  |  |
|--|--|--|--|
| Auto-ignition temperature                  | 67.78 °C (154 °F) estimated  |  |  |
| Decomposition temperature                  | Not available.   |  |  |
| Viscosity                                  | Not available.   |  |  |
| Other information                          |  |  |  |
| Density                                    | 0.99 g/cm3 estimated   |  |  |
| Explosive properties                       | Not explosive.   |  |  |
| Flammability class                         | Flammable IB estimated<br>Not oxidising.<br>0.99 estimated   |  |  |
| Oxidising properties                       |  |  |  |
| Specific gravity                           |  |  |  |
| 10. Stability and reactivity               | ty   |  |  |
| 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         | Hazardous polymerisation does not occur.   |  |  |
| Conditions to avoid                        | Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the decomposition temperature. Avoid temperatures exceeding the flash point. Contact with |  |  |

|                                     | incompatible materials.                        |
|-------------------------------------|--|
| Incompatible materials              | Strong oxidising agents. Nitrates. Peroxides.  |
| Hazardous decomposition<br>products | No hazardous decomposition products are known. |

## 11. Toxicological information

### Information on likely routes of exposure

| Inhalation   | Harmful if inhaled.   |
|--|---|
| Skin contact   | Causes severe skin burns. Harmful in contact with skin. May cause an allergic skin reaction.  |
| Eye contact  | Causes serious eye damage.  |
| Ingestion  | Causes digestive tract burns.   |
| Symptoms related to the<br>physical, chemical and<br>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

Acute toxicity

Harmful if inhaled. Harmful in contact with skin.

| Components               | Species                      | Test Results |  |
|--------------------------|------------------------------|--------------|--|
| BUTYLATED HYDROXY        | TOLUENE (BHT) (CAS 128-37-0) |              |  |
| <u>Acute</u>             |                              |              |  |
| Oral                     |                              |              |  |
| LD50                     | Rat                          | 890 mg/kg    |  |
| Lauryl methacrylate (CAS | \$ 142-90-5)                 |              |  |
| <u>Acute</u>             |                              |              |  |
| Oral                     |                              |              |  |
| LD50                     | Rat                          | > 5 g/kg     |  |
| Maleic acid (CAS 110-16- | -7)                          |              |  |
| <u>Acute</u>             |                              |              |  |
| Dermal                   |                              |              |  |
| LD50                     | Rabbit                       | 1560 mg/kg   |  |
| Oral                     |                              |              |  |
| LD50                     | Rat                          | 708 mg/kg    |  |
|                          |                              |              |  |

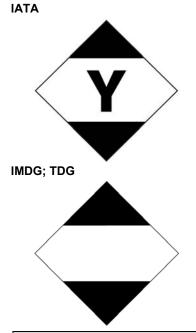
| Components  | Species                          | Test Results   |
|---|----------------------------------|--|
| Vethyl methacrylate (CAS 80-62-6                          | i)                               |  |
| Acute   |                                  |  |
| Inhalation  |                                  |  |
| LC50  | Mouse                            | 18.5 mg/l, 2 Hours   |
| Oral  | -                                |  |
| LD50  | Rat                              | 7800 mg/kg   |
| Skin corrosion/irritation                                 | Causes severe skin burns a       | nd eye damage.   |
| Serious eye damage/eye<br>rritation                       | Causes serious eye damage        | 3.   |
| Respiratory or skin sensitisatior                         | ı                                |  |
| ACGIH sensitisation                                       |                                  |  |
| Methyl methacrylate (CAS<br>Canada - Alberta OELs: Irrita |                                  | Dermal sensitisation   |
| BUTYLATED HYDROXY<br>(CAS 128-37-0)                       | TOLUENE (BHT)                    | Irritant   |
| Methacrylic acid (CAS 79<br>Canada - Manitoba OELs Ha     |                                  | Irritant   |
| Methyl methacrylate (CAS<br>Canada - Quebec OELs: Ser     |                                  | Dermal sensitisation   |
| Methyl methacrylate (CAS<br>Canada - Saskatchewan OE      | -                                | Sensitiser.  |
| Methyl methacrylate (CAS                                  |                                  | Sensitiser.  |
| Respiratory sensitisation                                 | Not a respiratory sensitizer.    |  |
| Skin sensitisation  | May cause an allergic skin r     | eaction.   |
| Germ cell mutagenicity                                    |                                  | product or any components present at greater than 0.1% are   |
| Carcinogenicity   |                                  |  |
| ACGIH Carcinogens   |                                  |  |
| BUTYLATED HYDROXY<br>(CAS 128-37-0)                       | TOLUENE (BHT)                    | A4 Not classifiable as a human carcinogen.   |
| Methyl methacrylate (CAS<br>Canada - Manitoba OELs: ca    | ,                                | A4 Not classifiable as a human carcinogen.   |
| BUTYLATED HYDROXY<br>(CAS 128-37-0)                       |                                  | Not classifiable as a human carcinogen.  |
| Methyl methacrylate (CAS                                  |                                  | Not classifiable as a human carcinogen.  |
| IARC Monographs. Overall E                                | -                                | -  |
| BUTYLATED HYDROXY<br>(CAS 128-37-0)                       | IOLUENE (BHI)                    | 3 Not classifiable as to carcinogenicity to humans.  |
| Methyl methacrylate (CAS<br>P-BENZOQUINONE (CAS           |                                  | 3 Not classifiable as to carcinogenicity to humans.<br>3 Not classifiable as to carcinogenicity to humans.               |
| Reproductive toxicity                                     | This product is not expected     | to cause reproductive or developmental effects.  |
| Specific target organ toxicity -<br>single exposure       | Not classified.                  |  |
| Specific target organ toxicity -<br>repeated exposure     | Not classified.                  |  |
| Aspiration hazard   | Not an aspiration hazard.        |  |
| Chronic effects   | Prolonged inhalation may be      | e harmful.   |
| 12. Ecological information                                |                                  |  |
| Ecotoxicity   | The product is not classified    | as environmentally hazardous. However, this does not exclude the   |
| Parsistance and degradability                             |                                  | ent spills can have a harmful or damaging effect on the environment.<br>degradability of any ingredients in the mixture. |
| Persistence and degradability                             | ino uala is avaliable off life ( |  |
| Bioaccumulative potential                                 | al / water (las Kaus)            |  |
| Partition coefficient n-octan<br>Maleic acid              | oi / water (log Kow)             | -0.48  |
| Material name: PLEXUS® MA8105 Ad                          | dhesive                          | SDS CANA   |

| Partition coefficient n-octa | anol / water (log Kow)  |
|------------------------------|---|
| Methacrylic acid             | 0.93  |
| Methyl methacrylate          | 1.38  |
| P-BENZOQUINONE               | 0.2   |
| 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<br>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<br>emptied. Empty containers should be taken to an approved waste handling site for recycling or<br>disposal. |  |

## 14. Transport information

| TDG                            |  |
|--------------------------------|--|
| UN number                      | UN2924   |
| UN proper shipping name        | FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Methyl methacrylate, Methacrylic acid), Limited             |
|                                | Quantity   |
| Transport hazard class(es)     |  |
| Class                          | 3  |
| Subsidiary risk                | 8  |
| Packing group                  | II   |
| Environmental hazards          | Not available.   |
| Special precautions for user   | Read safety instructions, SDS and emergency procedures before handling.                          |
| ΙΑΤΑ                           |  |
| UN number                      | UN2924   |
| UN proper shipping name        | Flammable liquid, corrosive, n.o.s. (Methyl Methacrylate, METHACRYLIC ACID), Limited Quantity    |
| Transport hazard class(es)     |  |
| Class                          | 3  |
| Subsidiary risk                | 8  |
| Packing group                  | II   |
| Environmental hazards          | No.  |
| ERG Code                       | 3CH  |
| · ·                            | Read safety instructions, SDS and emergency procedures before handling.                          |
| Other information              |  |
| Passenger and cargo            | Allowed with restrictions.   |
| aircraft                       |  |
| Cargo aircraft only            | Allowed with restrictions.   |
| IMDG                           |  |
| UN number                      | UN2924   |
| UN proper shipping name        | FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Methyl Methacrylate, METHACRYLIC ACID),<br>Limited Quantity |
| Transport hazard class(es)     |  |
| Class                          | 3  |
| Subsidiary risk                | 8  |
| Packing group                  | II   |
| Environmental hazards          |  |
| Marine pollutant               | No.  |
| EmS                            | F-E, S-C   |
| Special precautions for user   | Read safety instructions, SDS and emergency procedures before handling.                          |
| Transport in bulk according to | Not established.   |
| Annex II of MARPOL 73/78 and   |  |
| the IBC Code                   |  |



## 15. Regulatory information

| anadian regulations                           | This product has been classified in accordance with the hazard criter<br>contains all the information required by the HPR.   | ria of the HPR and the SDS |
|---|--|----------------------------|
| Controlled Drugs and Sub                      | ostances Act   |                            |
| Not regulated.                                |  |                            |
| Export Control List (CEPA                     | 1999, Schedule 3)  |                            |
| Not listed.                                   |  |                            |
| Greenhouse Gases                              |  |                            |
| Not listed.                                   | 41   |                            |
| Precursor Control Regula                      | tions  |                            |
| Not regulated.                                |  |                            |
| nternational regulations                      |  |                            |
| Stockholm Convention                          |  |                            |
| Not applicable.<br>Rotterdam Convention       |  |                            |
| Not applicable.<br>Kyoto Protocol             |  |                            |
| Not applicable.<br>Montreal Protocol          |  |                            |
| Not applicable.<br>Basel Convention           |  |                            |
| Not applicable.                               |  |                            |
| nternational Inventories                      |  |                            |
| Country(s) or region                          | Inventory name   | On inventory (yes/no)*     |
|   | Avertaglian Inventory of Chamical Cylesterson (AICC)   | <br>N                      |
| Australia                                     | Australian Inventory of Chemical Substances (AICS)   | NO                         |
| Australia<br>Canada                           | Domestic Substances List (DSL)   | No<br>Yes                  |
|   | -  |                            |
| Canada  | Domestic Substances List (DSL)   | Yes                        |
| Canada<br>Canada                              | Domestic Substances List (DSL)<br>Non-Domestic Substances List (NDSL)  | Yes                        |
| Canada<br>Canada<br>China                     | Domestic Substances List (DSL)<br>Non-Domestic Substances List (NDSL)<br>Inventory of Existing Chemical Substances in China (IECSC)<br>European Inventory of Existing Commercial Chemical  | Yes<br>No<br>Yes           |
| Canada<br>Canada<br>China<br>Europe           | Domestic Substances List (DSL)<br>Non-Domestic Substances List (NDSL)<br>Inventory of Existing Chemical Substances in China (IECSC)<br>European Inventory of Existing Commercial Chemical<br>Substances (EINECS)   | Yes<br>No<br>Yes<br>No     |
| Canada<br>Canada<br>China<br>Europe<br>Europe | Domestic Substances List (DSL)<br>Non-Domestic Substances List (NDSL)<br>Inventory of Existing Chemical Substances in China (IECSC)<br>European Inventory of Existing Commercial Chemical<br>Substances (EINECS)<br>European List of Notified Chemical Substances (ELINCS) | Yes<br>No<br>Yes<br>No     |

| Country(s) or region  | Inventory name  | On inventory (yes/no)* |
|---|---|------------------------|
| Philippines   | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No                     |
| Taiwan  | Taiwan Chemical Substance Inventory (TCSI)                        | Yes                    |
| United States & Puerto Rico   | Toxic Substances Control Act (TSCA) Inventory                     | Yes                    |
| *A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)<br>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<br>country(s). |   |                        |

| 16. Other information | tion  |
|-----------------------|---|
| Issue date            | 25-November-2021  |
| 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. |

# SAFETY DATA SHEET

| 1. Identification              |  |   |  |  |
|--------------------------------|--|---|--|--|
| Product identifier             | PLEXUS® MA8105 Activator   |   |  |  |
| Other means of identification  | None.  |   |  |  |
| Recommended use                | Not available.   |   |  |  |
| Recommended restrictions       | None known.  |   |  |  |
| 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   |   |  |  |
| Fax                            |  |   |  |  |
| E-mail                         |  |   |  |  |
| Emergency telephone<br>number  | 800-424-9300   |   |  |  |
| Supplier                       | Not available.   |   |  |  |
| 2. Hazard identification       |  |   |  |  |
| Physical hazards               | Flammable liquids  | Category 2                              |  |  |
| Health hazards                 | Acute toxicity, inhalation   | Category 4                              |  |  |
|                                | Skin corrosion/irritation  | Category 2                              |  |  |
|                                | Serious eye damage/eye irritation  | Category 2B                             |  |  |
|                                | Sensitization, skin  | Category 1A                             |  |  |
|                                | Specific target organ toxicity following single exposure   | Category 3 respiratory tract irritation |  |  |
| Environmental hazards          | Not classified.  |   |  |  |
| Label elements                 |  |   |  |  |
|                                |  |   |  |  |
| Signal word                    | Danger   |   |  |  |
| Hazard statement               | Highly flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction.<br>Causes eye irritation. Harmful if inhaled. May cause respiratory irritation.   |   |  |  |
| Precautionary statement        |  |   |  |  |
| Prevention                     | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>Keep container tightly closed. Ground and bond container and receiving equipment. Use<br>explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to<br>prevent static discharges. Avoid breathing mist/vapours. Wash thoroughly after handling. Use<br>only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out<br>of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.                     |   |  |  |
| Response                       | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF<br>INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse<br>cautiously with water for several minutes. Remove contact lenses, if present and easy to do.<br>Continue rinsing. Call a POISON CENTRE/doctor if you feel unwell. If skin irritation or rash<br>occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take<br>off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to<br>extinguish. |   |  |  |

Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal

Storage

Other hazards

Supplemental information

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapour. May cause flash fire or explosion.

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

12.63 % of the mixture consists of component(s) of unknown acute oral toxicity. 85.58 % of the mixture consists of component(s) of unknown acute dermal toxicity. 85.58 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 85.58 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

## 3. Composition/information on ingredients

| 80-62-6   | 60 - 100 |
|-----------|----------|
|           |          |
| 8002-74-2 | 1 - 5    |
| 471-34-1  | 0.1 - 1  |
|           | 471-34-1 |

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

| 4. First-aid measures  |  |
|--|--|
| Inhalation   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison centre or doctor/physician if you feel unwell.  |
| 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<br>symptoms/effects, acute and<br>delayed                     | Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.   |
| Indication of immediate<br>medical attention and special<br>treatment needed | Provide general supportive measures and treat symptomatically. Thermal 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  | Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). 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. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.  |
| Unsuitable extinguishing media   | Do not use water jet as an extinguisher, as this will spread the fire.   |
| Specific hazards arising from the chemical                                   | Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed. |
| Special protective equipment<br>and precautions for firefighters             | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  |
| Fire fighting  | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do  |

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

so without risk.

Highly flammable liquid and vapour.

equipment/instructions

## 6. Accidental release measures

| 6. Accidental release mea   | sures   |
|---|---|
| Personal precautions,<br>protective equipment and<br>emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.  |
| Methods and materials for<br>containment and cleaning up                  | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.   |
|   | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.  |
|   | Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.   |
|   | Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.   |
| Environmental precautions   | Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.  |
| 7. Handling and storage   |   |
| Precautions for safe handling   | Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
|   | For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".  |
| Conditions for safe storage,<br>including any incompatibilities           | Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).   |

## 8. Exposure controls/personal protection

## Occupational exposure limits

| US. ACGIH Threshold Limit Values<br>Components | Туре | Value   | Form  |
|--|------|---------|-------|
| METHYL METHACRYLATE<br>(CAS 80-62-6)           | STEL | 100 ppm |       |
|  | TWA  | 50 ppm  |       |
| Paraffin wax (CAS<br>8002-74-2)                | TWA  | 2 mg/m3 | Fume. |

| Туре | Value              | Form  |
|------|--------------------|---|
| TWA  | 10 mg/m3           |   |
| STEL | 410 mg/m3          |   |
|      | 100 ppm            |   |
| TWA  | 205 mg/m3          |   |
|      | 50 ppm             |   |
| TWA  | 2 mg/m3            | Fume.   |
|      | TWA<br>STEL<br>TWA | TWA10 mg/m3STEL410 mg/m3100 ppmTWA205 mg/m350 ppm |

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

| Components                           | Туре | Value    | Form                 |
|--------------------------------------|------|----------|----------------------|
| Calcium carbonate (CAS<br>471-34-1)  | STEL | 20 mg/m3 | Total dust.          |
|                                      | TWA  | 3 mg/m3  | Respirable fraction. |
|                                      |      | 10 mg/m3 | Total dust.          |
| METHYL METHACRYLATE<br>(CAS 80-62-6) | STEL | 100 ppm  |                      |
|                                      | TWA  | 50 ppm   |                      |
| Paraffin wax (CAS<br>8002-74-2)      | TWA  | 2 mg/m3  | Fume.                |

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

Canada Alberta OEL a (Occupational Health & Safety Code, Schedule 1, Table 2)

| Components                           | Туре | Value   | Form  |
|--------------------------------------|------|---------|-------|
| METHYL METHACRYLATE<br>(CAS 80-62-6) | STEL | 100 ppm |       |
|                                      | TWA  | 50 ppm  |       |
| Paraffin wax (CAS<br>8002-74-2)      | TWA  | 2 mg/m3 | Fume. |

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

| Components                           | Туре | ,<br>Value | Form  |
|--------------------------------------|------|------------|-------|
| METHYL METHACRYLATE<br>(CAS 80-62-6) | STEL | 100 ppm    |       |
|                                      | TWA  | 50 ppm     |       |
| Paraffin wax (CAS<br>8002-74-2)      | TWA  | 2 mg/m3    | Fume. |

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

| Components                           | Туре | Value     | Form        |  |
|--------------------------------------|------|-----------|-------------|--|
| Calcium carbonate (CAS<br>471-34-1)  | TWA  | 10 mg/m3  | Total dust. |  |
| METHYL METHACRYLATE<br>(CAS 80-62-6) | TWA  | 205 mg/m3 |             |  |
|                                      |      | 50 ppm    |             |  |
| Paraffin wax (CAS<br>8002-74-2)      | TWA  | 2 mg/m3   | Fume.       |  |
|                                      |      |           |             |  |

## Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

| Components                           | Туре      | Value Form |  |
|--------------------------------------|-----------|------------|--|
| Calcium carbonate (CAS<br>471-34-1)  | 15 minute | 20 mg/m3   |  |
|                                      | 8 hour    | 10 mg/m3   |  |
| METHYL METHACRYLATE<br>(CAS 80-62-6) | 15 minute | 100 ppm    |  |
|                                      | 8 hour    | 50 ppm     |  |

| Canada. Saskatchewan Ol<br>Components | ELs (Occupational Health and Safety Regu<br>Type   | ulations, 1996, Table 21)<br>Value   | Form   |
|---------------------------------------|--|--|--|
| Paraffin wax (CAS<br>8002-74-2)       | 15 minute  | 4 mg/m3  | Fume.  |
|                                       | 8 hour   | 2 mg/m3  | Fume.  |
| Biological limit values               | No biological exposure limits noted for th   | e ingredient(s).   |  |
| Appropriate engineering controls      | Explosion-proof general and local exhaus<br>Ventilation rates should be matched to con-<br>exhaust ventilation, or other engineering<br>exposure limits. If exposure limits have n<br>acceptable level. Provide eyewash statio | onditions. If applicable, use<br>controls to maintain airbor<br>ot been established, maint | e process enclosures, local<br>ne levels below recommended |
| Individual protection measures        | s, such as personal protective equipment   |  |  |
| Eye/face protection                   | Chemical respirator with organic vapour  | cartridge and full facepiece   | 9.   |
| Skin protection                       |  |  |  |
| Hand protection                       | Wear appropriate chemical resistant glov   | es.  |  |
| Other                                 | Wear appropriate chemical resistant clot   | hing.  |  |
| Respiratory protection                | Chemical respirator with organic vapour  | cartridge and full facepiece   | 9.   |
| Thermal hazards                       | Wear appropriate thermal protective cloth  | ning, when necessary.  |  |
| General hygiene<br>considerations     | When using do not smoke. Always obser<br>after handling the material and before ea<br>clothing and protective equipment to rem<br>be allowed out of the workplace.   | ting, drinking, and/or smok  | king. Routinely wash work                                  |

## 9. Physical and chemical properties

| - |   |   |   |   |    |   |    |   |
|---|---|---|---|---|----|---|----|---|
| Α | p | p | e | а | ra | n | CE | è |

| Appearance                                 |                               |
|--|-------------------------------|
| Physical state                             | Liquid.                       |
| Form                                       | Liquid.                       |
| Colour                                     | Not available.                |
| Odour                                      | Not available.                |
| Odour threshold                            | Not available.                |
| рН   | Not available.                |
| Melting point/freezing point               | -48 °C (-54.4 °F) estimated   |
| Initial boiling point and boiling range    | 100.5 °C (212.9 °F) estimated |
| Flash point                                | 10.0 °C (50.0 °F) estimated   |
| Evaporation rate                           | Not available.                |
| Flammability (solid, gas)                  | Not applicable.               |
| Upper/lower flammability or exp            | losive limits                 |
| Flammability limit - lower<br>(%)          | 2.1 % estimated               |
| Flammability limit - upper<br>(%)          | 12.5 % estimated              |
| Explosive limit - lower ( %)               | Not available.                |
| Explosive limit – upper<br>(%)             | Not available.                |
| Vapour pressure                            | 51.33 hPa estimated           |
| Vapour density                             | Not available.                |
| Relative density                           | Not available.                |
| Solubility(ies)                            |                               |
| Solubility (water)                         | Not available.                |
| Partition coefficient<br>(n-octanol/water) | Not available.                |
| Auto-ignition temperature                  | Not available.                |

| Decomposition temperature   | Not available.         |
|-----------------------------|------------------------|
| Viscosity                   | Not available.         |
| Other information           |                        |
| Density                     | 0.96 g/cm3             |
| Explosive properties        | Not explosive.         |
| Flammability class          | Flammable IB estimated |
| Oxidising properties        | Not oxidising.         |
| Specific gravity            | 0.96                   |
| 10. Stability and reactivit | у                      |

| 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  | Hazardous polymerisation does not occur.   |
| Conditions to avoid                 | Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the<br>decomposition temperature. Avoid temperatures exceeding the flash point. Contact with<br>incompatible materials. |
| Incompatible materials              | Strong oxidising agents. Nitrates. Peroxides.  |
| Hazardous decomposition<br>products | No hazardous decomposition products are known.   |

## 11. Toxicological information

| Information on likely routes of exposure                                     |  |  |
|--|--|--|
| Inhalation   | Harmful if inhaled.  |  |
| Skin contact   | Causes skin irritation. May cause an allergic skin reaction.   |  |
| Eye contact  | Causes eye irritation.   |  |
| Ingestion  | Expected to be a low ingestion hazard.   |  |
| Symptoms related to the physical, chemical and toxicological characteristics | Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. |  |
| Information on toxicological effects   |  |  |
| Acute toxicity   | Harmful if inhaled.  |  |

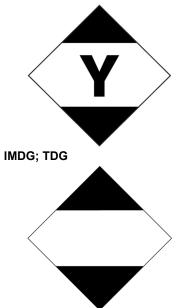
| Acute toxicity                                      |                         |                      |                    |
|---|-------------------------|----------------------|--------------------|
| Components  | Species                 |                      | Test Results       |
| Calcium carbonate (CAS 471-3                        | 34-1)                   |                      |                    |
| Acute   |                         |                      |                    |
| Oral  |                         |                      |                    |
| LD50  | Rat                     |                      | 6450 mg/kg         |
| Methyl methacrylate (CAS 80-6                       | 62-6)                   |                      |                    |
| <u>Acute</u>  |                         |                      |                    |
| Inhalation  |                         |                      |                    |
| LC50  | Mouse                   |                      | 18.5 mg/l, 2 Hours |
| Oral  |                         |                      |                    |
| LD50  | Rat                     |                      | 7800 mg/kg         |
| Skin corrosion/irritation                           | Causes skin irritation. |                      |                    |
| Serious eye damage/eye irritation                   | Causes eye irritation.  |                      |                    |
| Respiratory or skin sensitisa                       | ition                   |                      |                    |
| ACGIH sensitisation                                 |                         |                      |                    |
| Methyl methacrylate (CAS 80-62-6)                   |                         | Dermal sensitisation |                    |
| Canada - Alberta OELs: Irritant                     |                         |                      |                    |
| Calcium carbonate (CAS 471-34-1)                    |                         | Irritant             |                    |
| Canada - Manitoba OELs Hazard: Dermal sensitization |                         |                      |                    |
| Methyl methacrylate (CAS 80-62-6)                   |                         | Dermal sensitisation |                    |
|   |                         |                      |                    |

| Canada - Quebec OELs: Ser                              | oitizor  |  |  |
|--|--|--|--|
| Methyl methacrylate (CAS                               |  | Sensitiser.  |  |
| Canada - Saskatchewan OE                               |  | Sensuser.  |  |
| Methyl methacrylate (CAS                               |  | Sensitiser.  |  |
| Respiratory sensitisation                              | Not a respiratory sensitizer.  |  |  |
| Skin sensitisation                                     | May cause an allergic skin rea   | ction.   |  |
| Germ cell mutagenicity                                 |  | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.                           |  |
| Carcinogenicity  |  |  |  |
| ACGIH Carcinogens                                      |  |  |  |
| Methyl methacrylate (CAS<br>Canada - Manitoba OELs: ca |  | A4 Not classifiable as a human carcinogen.   |  |
| Methyl methacrylate (CAS<br>IARC Monographs. Overall I | S 80-62-6)<br>Evaluation of Carcinogenicity  | Not classifiable as a human carcinogen.  |  |
| Methyl methacrylate (CAS                               |  | 3 Not classifiable as to carcinogenicity to humans.  |  |
| Reproductive toxicity                                  | This product is not expected to  | cause reproductive or developmental effects.   |  |
| Specific target organ toxicity - single exposure       | May cause respiratory irritation   | 1.   |  |
| Specific target organ toxicity - repeated exposure     | Not classified.  |  |  |
| Aspiration hazard                                      | Not an aspiration hazard.  |  |  |
| Chronic effects  | Prolonged inhalation may be h  | armful.  |  |
| 12. Ecological information                             | 1  |  |  |
| 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 de   | gradability of any ingredients in the mixture.   |  |
| Bioaccumulative potential                              |  |  |  |
| Partition coefficient n-octan<br>Methyl methacrylate   | ol / water (log Kow)   | 1.38   |  |
| Mobility in soil                                       | No data available.   |  |  |
| Other adverse effects                                  |  | al effects (e.g. ozone depletion, photochemical ozone creation<br>, global warming potential) are expected from this component.            |  |
| 13. Disposal consideratio                              | ns   |  |  |
| Disposal instructions                                  | Collect and reclaim or dispose   | in sealed containers at licensed waste disposal site. Dispose of ice with local/regional/national/international regulations.               |  |
| Local disposal regulations                             | Dispose in accordance with all   | applicable regulations.  |  |
| Hazardous waste code                                   | The waste code should be ass disposal company.   | igned in discussion between the user, the producer and the waste   |  |
| Waste from residues / unused<br>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                                 |  | retain product residue, follow label warnings even after container is<br>ould be taken to an approved waste handling site for recycling or |  |
| 14. Transport information                              |  |  |  |
| TDG  |  |  |  |
| UN number  | UN1133   |  |  |
| UN proper shipping name<br>Transport hazard class(es)  | ADHESIVES containing flamm   | able liquid, Limited Quantity  |  |
| Class<br>Subsidiers risk                               | 3  |  |  |

### ΙΑΤΑ

| ΙΑΤΑ   |   |
|--|---|
| UN number  | UN1133  |
| UN proper shipping name  | Adhesives containing flammable liquid, Limited Quantity                 |
| Transport hazard class(es)   |   |
| Class  | 3   |
| Subsidiary risk  | -   |
| Packing group  | II  |
| Environmental hazards  | No.   |
| ERG Code   | 3L  |
| Special precautions for user   | Read safety instructions, SDS and emergency procedures before handling. |
| Other information  |   |
| Passenger and cargo<br>aircraft  | Allowed with restrictions.  |
| Cargo aircraft only  | Allowed with restrictions.  |
| IMDG   |   |
| UN number  | UN1133  |
| UN proper shipping name  | ADHESIVES containing flammable liquid, Limited Quantity                 |
| Transport hazard class(es)   |   |
| Class  | 3   |
| Subsidiary risk  | -   |
| Packing group  | 11  |
| Environmental hazards  |   |
| Marine pollutant   | No.   |
| EmS  | F-E, S-D  |
| Special precautions for user   | Read safety instructions, SDS and emergency procedures before handling. |
| Transport in bulk according to<br>Annex II of MARPOL 73/78 and<br>the IBC Code | Not established.  |
|  |   |

### ΙΑΤΑ



## 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 Regulation            | ons   |                        |
| Not regulated.                          |   |                        |
| International regulations               |   |                        |
| Stockholm Convention                    |   |                        |
| Not applicable.<br>Rotterdam Convention |   |                        |
| Not applicable.<br>Kyoto Protocol       |   |                        |
| Not applicable.<br>Montreal Protocol    |   |                        |
| Not applicable.<br>Basel Convention     |   |                        |
| Not applicable.                         |   |                        |
| International Inventories               |   |                        |
| Country(s) or region                    | Inventory name  | On inventory (yes/no)* |
| Australia                               | Australian Inventory of Chemical Substances (AICS)                        | Yes                    |
| Canada                                  | Domestic Substances List (DSL)  | Yes                    |
| Canada                                  | Non-Domestic Substances List (NDSL)                                       | No                     |
| China                                   | Inventory of Existing Chemical Substances in China (IECSC)                | Yes                    |
| Europe                                  | European Inventory of Existing Commercial Chemical<br>Substances (EINECS) | No                     |
| Europe                                  | European List of Notified Chemical Substances (ELINCS)                    | No                     |
| Japan                                   | Inventory of Existing and New Chemical Substances (ENCS)                  | No                     |
| Korea                                   | Existing Chemicals List (ECL)   | Yes                    |
| New Zealand                             | New Zealand Inventory   | Yes                    |
| Philippines                             | Philippine Inventory of Chemicals and Chemical Substances (PICCS)         | No                     |
| Taiwan                                  | Taiwan Chemical Substance Inventory (TCSI)                                | Yes                    |
| United States & Puerto Rico             | Toxic Substances Control Act (TSCA) Inventory                             | Yes                    |

\*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<br>Revision date<br>Version No. | 25-November-2021<br>29-March-2022<br>02   |
|--|---|
| 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. |
| <b>Revision information</b>                | HazReg Data: International Inventories  |