1. Identification

Product identifier: PLEXUS® PU2105 Activator

Other means of identification

SKU#: 21054

Recommended use: Not available.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name: ITW Performance Polymers

Address: 30 Endicott Street

Danvers, MA 01923

United States

Telephone: Customer Service 978-777-1100

Website: www.itwperformancepolymers.com

E-mail: Not available.

Contact person: EHS Department

Emergency phone number:

Chemtrec 800-424-9300

International 703-527-3887

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards:

Acute toxicity, inhalation: Category 4

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2A

Sensitization, respiratory: Category 1

Sensitization, skin: Category 1A

Carcinogenicity: Category 2

Specific target organ toxicity, single exposure: Category 3 respiratory tract irritation

Specific target organ toxicity, repeated exposure: Category 2

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Signal word: Danger

Hazard statement: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.
Response
If on skin: Wash with plenty of 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. If exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. If experiencing respiratory symptoms: Call a poison center/doctor. Take off contaminated clothing and wash it before reuse.

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

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

Hazard(s) not otherwise classified (HNOC)
None known.

Supplemental information
50% of the mixture consists of component(s) of unknown acute oral toxicity. 50% of the mixture consists of component(s) of unknown acute dermal toxicity. 50% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 50% 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 &amp; CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixtures</td>
<td>Diphenylmethane Diisocyanate [isomers And Homologues] 9016-87-9</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td>30 - 60</td>
</tr>
</tbody>
</table>

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. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a poison center or doctor/physician.

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
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Most important symptoms/effects, acute and delayed
Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Indication of immediate medical attention and special treatment needed
IF exposed or concerned: Get medical advice/attention. 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.

General information

5. Fire-fighting measures

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

Unsuitable extinguishing media
Water. 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/vapors. 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. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Store locked up. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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. General ventilation normally adequate. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment
Eye/face protection
Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection
Hand protection
Wear appropriate chemical resistant gloves.

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

Respiratory protection
Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
Observe any medical surveillance requirements. 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
Syrupy Liquid.

Physical state
Liquid.

Form
Liquid.

Color
Black

Odor
Slight.

Odor threshold
Not available.

pH
Not available.

Melting point/freezing point
Not available.
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt; 572 °F (&gt; 300 °C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 392.0 °F (&gt; 200.0 °C)</td>
</tr>
<tr>
<td>Evaporation rate</td>
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<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
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<tr>
<td>Upper/lower flammability or explosive limits</td>
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</tr>
<tr>
<td>Flammability limit - lower (%)</td>
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</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
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<tr>
<td>Explosive limit - upper (%)</td>
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<tr>
<td>Vapor pressure</td>
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<tr>
<td>Vapor density</td>
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</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
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<tr>
<td>Solubility(ies)</td>
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<tr>
<td>Solubility (water)</td>
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<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
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<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other information</td>
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<tr>
<td>Density</td>
<td>1.95 g/cm³</td>
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<tr>
<td>Explosive properties</td>
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<td>Flammability class</td>
<td>Combustible IIIB estimated</td>
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<tr>
<td>Oxidizing properties</td>
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<tr>
<td>Specific gravity</td>
<td>1.95</td>
</tr>
</tbody>
</table>

### 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**


**Hazardous decomposition products**

No hazardous decomposition products are known.

### 11. Toxicological information

**Information on likely routes of exposure**

- **Inhalation**: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- **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. May cause respiratory irritation. Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

**Information on toxicological effects**

- **Acute toxicity**: Harmful if inhaled.
- **Skin corrosion/irritation**: Causes skin irritation.
- **Serious eye damage/eye irritation**: Causes serious eye irritation.
Respiratory or skin sensitization

Respiratory sensitization  May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitization  May cause an allergic skin reaction.

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

Carcinogenicity  Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Diphenylmethane Diisocyanate [isomers And Homologues] (CAS 9016-87-9) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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

Specific target organ toxicity - single exposure  May cause respiratory irritation.

Specific target organ toxicity - repeated exposure  May cause damage to organs through prolonged or repeated exposure.

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

Chronic effects  Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure.

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

DOT  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

US federal regulations  This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Diphenylmethane Diisocyanate [isomers And Homologues] (CAS 9016-87-9)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Diphenylmethane Diisocyanate [isomers And Homologues] (CAS 9016-87-9)

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern

Diphenylmethane Diisocyanate [isomers And Homologues] (CAS 9016-87-9)

Methylene Diphenyl Diisocyanate (MDI) And Related Compounds Action Plan [RIN 2070-ZA15]

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical

Classified hazard categories

Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name | CAS number | % by wt.
--- | --- | ---
Diphenylmethane Diisocyanate [isomers And Homologues] | 9016-87-9 | 30 - 60

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

California Proposition 65

WARNING: This product can expose you to Carbon Black, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance
Carbon Black (CAS 1333-86-4) Listed: February 21, 2003

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
Diphenylmethane Diisocyanate [isomers And Homologues] (CAS 9016-87-9)

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>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
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<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
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<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
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<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
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<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, including date of preparation or last revision

**Issue date**
01-24-2020

**Version #**
01

**HMIS® ratings**
- Health: 2
- Flammability: 1
- Physical hazard: 0

**NFPA ratings**
- Health: 2
- Flammability: 1
- Instability: 0

**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.