SAFETY DATA SHEET

1. Identification

Product identifier: PLEXUS® MA2230/2245/2260/2290 EU Blue Activator

Other means of identification
SKU#: IT247

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
- Skin corrosion/irritation: Category 2
- Serious eye damage/eye irritation: Category 2A
- Sensitization, skin: Category 1
- Specific target organ toxicity, single exposure: Category 3 respiratory tract irritation

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Signal word: Warning

Hazard statement: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation.

Precautionary statement
Prevention: Avoid breathing 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 eye protection/face protection. Wear protective gloves.

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. Call a poison center/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

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: None.
### 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Benzyl</td>
<td>3-isobutyryl oxy-1-isopropyl-2,2-dimethylpropyl Phthalate</td>
<td>16883-83-3</td>
<td>20 - 40</td>
</tr>
<tr>
<td></td>
<td>DIBUTYL MALEATE</td>
<td></td>
<td>105-76-0</td>
<td>20 - 40</td>
</tr>
<tr>
<td></td>
<td>Dibenzoyl Peroxide</td>
<td></td>
<td>94-36-0</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td></td>
<td>ISODECYL BENZOATE</td>
<td></td>
<td>131298-44-7</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td></td>
<td>Oxirane, Methyl-, Polymer With</td>
<td>Oxirane, Monobutyl Ether</td>
<td>9038-95-3</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td></td>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>10 - 20</td>
</tr>
</tbody>
</table>

### 4. First-aid measures

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center 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**
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

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

**Indication of immediate medical attention and special treatment needed**
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. Dry chemical powder. Carbon dioxide (CO2).

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

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

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

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

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

**General fire hazards**
No unusual fire or explosion hazards noted.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/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. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage

Precautions for safe handling
Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. 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 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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibenzoyl Peroxide (CAS 94-36-0)</td>
<td>5 mg/m3</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibenzoyl Peroxide (CAS 94-36-0)</td>
<td>5 mg/m3</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibenzoyl Peroxide (CAS 94-36-0)</td>
<td>5 mg/m3</td>
</tr>
</tbody>
</table>

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

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

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

Respiratory protection

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Blue</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>217.4 °F (103 °C) estimated</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>285.8 °F (141.0 °C) estimated</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits
   Flammability limit - lower (%) Not available.
   Flammability limit - upper (%) Not available.
   Explosive limit - lower (%) Not available.
   Explosive limit - upper (%) Not available.
Vapor pressure 0.5 mm Hg @ 68 F
Vapor density Not available.
Relative density Not available.
Solubility(ies)
   Solubility (water) Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature 176 °F (80 °C) estimated
Decomposition temperature Not available.
Viscosity Not available.
Other information
   Density 1.16 g/cm³ estimated
   Explosive properties Not explosive.
   Flammability class Combustible III B estimated
   Oxidizing properties Not oxidizing.
   Specific gravity 1.16 estimated

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 Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
Incompatible materials Alcohols. Amines.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
   Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
   Skin contact Causes skin irritation. May cause an allergic skin reaction.
   Eye contact Causes serious eye irritation.
   Ingestion Expected to be a low ingestion hazard.
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. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
Information on toxicological effects
   Acute toxicity Not known.

Components Test Results

<table>
<thead>
<tr>
<th>Dibenzoyl Peroxide (CAS 94-36-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>LD50</td>
</tr>
<tr>
<td>Rat</td>
</tr>
<tr>
<td>LD50</td>
</tr>
</tbody>
</table>

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

Causes serious eye irritation.

Respiratory or skin sensitization

- **Respiratory sensitization**
  Not a respiratory sensitizer.

- **Skin sensitization**
  May cause an allergic skin reaction.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

- Dibenzoyl Peroxide (CAS 94-36-0) 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

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

- May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

- Not classified.

Aspiration hazard

- Not an aspiration hazard.

Chronic effects

- Prolonged inhalation may be harmful.

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

- **Partition coefficient n-octanol / water (log Kow)**
  Dibenzoyl Peroxide 3.46

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

- **UN number** UN3082
- **UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s.
- **Transport hazard class(es)**
  - **Class** 9
  - **Subsidiary risk** -
  - **Packing group** III
  - **Environmental hazards** No.
ERG Code
9L

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft
Allowed with restrictions.

Cargo aircraft only
Allowed with restrictions.

IMDG
UN number
UN3082

UN proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es)
Class 9
Subsidiary risk -

Packing group
III

Environmental hazards

Marine pollutant
No.

EmS
F-A, S-F

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

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

IATA; IMDG

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
  Dibenzoyl Peroxide (CAS 94-36-0) % 1.0
- US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance
  Dibenzoyl Peroxide (CAS 94-36-0) Listed.

- Toxic Substances Control Act (TSCA)
- TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
  Not regulated.
- CERCLA Hazardous Substance List (40 CFR 302.4)
  Not listed.
- SARA 304 Emergency release notification
  Not regulated.
  Not listed.

- Superfund Amendments and Reauthorization Act of 1986 (SARA)
- SARA 302 Extremely hazardous substance
  Not listed.
- SARA 311/312 Hazardous chemical
  Yes
  Skin corrosion or irritation
  Serious eye damage or eye irritation
  Respiratory or skin sensitization
  Specific target organ toxicity (single or repeated exposure)
SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dibenzoyl Peroxide</td>
<td>94-36-0</td>
<td>2.5 - 10</td>
</tr>
</tbody>
</table>

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 chemicals including STYRENE, which is known to the State of California to cause cancer, and 1,2-BENZENEDICARBOXYLIC ACID, DI-C9-11-BRANCHED ALKYL ESTERS, C10-RICH, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance
- 2-Propenenitrile; Acrylonitrile, Cyanoethylene (CAS 107-13-1) Listed: July 1, 1987
- STYRENE (CAS 100-42-5) Listed: April 22, 2016

California Proposition 65 - CRT: Listed date/Developmental toxin
- 1,2-BENZENEDICARBOXYLIC ACID, DI-C9-11-BRANCHED ALKYL ESTERS, C10-RICH (CAS 68515-49-1) Listed: April 20, 2007
- BIS(2-PROPYLHEPTYL) PHTHALATE (CAS 53306-54-0) Listed: April 20, 2007

International Inventories

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

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

16. Other information, including date of preparation or last revision

| Issue date | 05-09-2019 |
| Revision date | 05-19-2020 |
| Version # | 03 |
| 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.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.