## 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>PLEXUS® MA2045/2145/2090 Black Activator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>IT496</td>
</tr>
<tr>
<td>SKU#</td>
<td>Not available.</td>
</tr>
<tr>
<td>Recommended use</td>
<td>None known.</td>
</tr>
<tr>
<td>Recommended restrictions</td>
<td>None known.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>ITW Performance Polymers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>30 Endicott Street</td>
</tr>
<tr>
<td></td>
<td>Danvers, MA 01923</td>
</tr>
<tr>
<td>United States</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>Customer Service</td>
</tr>
<tr>
<td></td>
<td>978-777-1100</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.itwperformancepolymers.com">www.itwperformancepolymers.com</a></td>
</tr>
<tr>
<td>E-mail</td>
<td>Not available.</td>
</tr>
<tr>
<td>Contact person</td>
<td>EHS Department</td>
</tr>
<tr>
<td>Emergency phone number</td>
<td>Chemtrec 800-424-9300</td>
</tr>
<tr>
<td></td>
<td>International 703-527-3887</td>
</tr>
</tbody>
</table>

## 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 | 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

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl 3-isobutyryloxy-1-isopropyl-2,2-dimethylethylpropyl Phthalate</td>
<td></td>
<td>16883-83-3</td>
<td>20 - 40</td>
</tr>
<tr>
<td>DIBUTYL MALEATE</td>
<td></td>
<td>105-76-0</td>
<td>20 - 40</td>
</tr>
<tr>
<td>ACRYLONITRILE STYRENE ACRYLATE COPOLYMER</td>
<td></td>
<td>26299-47-8</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Dibenzoyl Peroxide</td>
<td></td>
<td>94-36-0</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>ISODECYL BENZOATE</td>
<td></td>
<td>131298-44-7</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Oxirane, Methyl-, Polymer With Oxirane, Monobutyl Ether</td>
<td></td>
<td>9038-95-3</td>
<td>1 - 2.5</td>
</tr>
</tbody>
</table>

*Other components below reportable levels 2.5 - 10

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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.
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.

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

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

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<thead>
<tr>
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<th>Type</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Dibenzoyl Peroxide (CAS 94-36-0)</td>
<td>TWA</td>
<td>5 mg/m3</td>
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</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**: Wear appropriate chemical resistant gloves.
- **Hand protection**: Wear appropriate chemical resistant clothing.
- **Other**: Wear appropriate chemical resistant clothing.
- **Respiratory protection**: Chemical respirator with organic vapor cartridge and full facepiece.
- **Thermal hazards**: Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

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

**9. Physical and chemical properties**

- **Appearance**: Liquid.
- **Physical state**: Liquid.
- **Form**: Liquid.
- **Color**: Black.
Odor threshold: Not available.

pH: 6 - 8

Melting point/freezing point: 217.4 °F (103 °C) estimated

Initial boiling point and boiling range: Not available.

Flash point: 285.8 °F (141.0 °C) estimated

Evaporation rate: Not available.

Flammability (solid, gas): Not applicable.

Upper/lower flammability or explosive limits:
- Flammability limit - lower (%): Not available.
- Flammability limit - upper (%): Not available.
- Explosive limit - lower (%): Not available.
- Explosive limit - upper (%): Not available.

Vapor pressure: < 0.5 mm Hg @ 68 F

Vapor density: Not available.

Relative density: Not available.

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 IIIB 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: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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: 

Material name: PLEXUS® MA2045/2145/2090 Black Activator

IT496  Version #: 02  Revision date: 05-10-2019  Issue date: 05-10-2019
Acute toxicity
Not known.

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

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin 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
Not classifiable as to carcinogenicity to humans.

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 1910.1001-1052)
Not regulated.

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.

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.

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.

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
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.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes

 Classified hazard categories
 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 2-Propenenitrile; Acrylonitrile, Cyanoethylene, which is known to the State of California to cause cancer, and DIISODECYL PHTHALATE (DIDP), 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

| Material name: PLEXUS® MA2045/2145/2090 Black Activator | SDS US | IT496 | Version #: 02 | Revision date: 05-10-2019 | Issue date: 05-10-2019 | 6 / 7 |
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>
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<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>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
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<td>New Zealand</td>
<td>New Zealand Inventory</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>
<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

<table>
<thead>
<tr>
<th>Issue date</th>
<th>05-10-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>05-10-2019</td>
</tr>
<tr>
<td>Version #</td>
<td>02</td>
</tr>
<tr>
<td>HMIS® ratings</td>
<td>Health: 2</td>
</tr>
<tr>
<td></td>
<td>Flammability: 1</td>
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<tr>
<td></td>
<td>Physical hazard: 0</td>
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<tr>
<td>NFPA ratings</td>
<td>Health: 2</td>
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<tr>
<td></td>
<td>Flammability: 1</td>
</tr>
<tr>
<td></td>
<td>Instability: 0</td>
</tr>
</tbody>
</table>

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.