1. Identification

Product identifier: PLEXUS® MA830/832 EU Gray Activator
Other means of identification:
SKU#: IT258
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: Not available.
Emergency telephone number: 800-424-9300
Supplier: Not available.

2. Hazard identification

Physical hazards: Organic peroxides Type F
Health hazards: Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Sensitization, skin Category 1

Environmental hazards: Not classified.

Label elements

Signal word: Warning
Hazard statement: Heating may cause a fire. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

Precautionary statement

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep only in original packaging. Keep cool. Ground and bond container and receiving equipment. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.

Storage: Store in a well-ventilated place. Protect from sunlight. Store at temperatures not exceeding 25°C / 77°F. Store separately.

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

Other hazards: 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>BENZOYL PEROXIDE</td>
<td></td>
<td></td>
<td>94-36-0</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Epoxy Resin:--reaction Product Of</td>
<td></td>
<td>Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)</td>
<td>25068-38-6</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Oxydipropyl dibenzoate</td>
<td></td>
<td></td>
<td>27138-31-4</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td></td>
<td></td>
<td>13463-67-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>DIISODECYL PHTHALATE (DIDP)</td>
<td></td>
<td></td>
<td>26761-40-0</td>
<td>0.5 - 1.5</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td></td>
<td>30 - 60</td>
</tr>
</tbody>
</table>

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

4. First-aid measures

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

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

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

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

**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**
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**
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Withdraw immediately in case of rising sound from venting safety device or any discolouration of tanks due to fire.

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

**General fire hazards**
Heating may cause a fire.

6. Accidental release measures

**Personal precautions, protective equipment and 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. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas.

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: 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.

Precautions for safe handling
Keep away from heat, sparks and open flame. When using do not smoke. Keep away from clothing and other combustible materials. Avoid breathing mist/vapours. 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
Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Keep only in the original container. Store away from other materials.

### 8. Exposure controls/personal protection

#### Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZOYL PEROXIDE (CAS 94-36-0)</td>
<td>TWA</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

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<tr>
<th>Components</th>
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<th>Form</th>
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</thead>
<tbody>
<tr>
<td>BENZOYL PEROXIDE (CAS 94-36-0)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>BENZOYL PEROXIDE (CAS 94-36-0)</td>
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<td>DIISODECYL PHTHALATE (DIDP) (CAS 26761-40-0)</td>
<td>TWA</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m³</td>
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</tbody>
</table>
Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

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<td>TWA</td>
<td>10 mg/m³</td>
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</tr>
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Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

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<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZOYL PEROXIDE (CAS 94-36-0)</td>
<td>15 minute</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>8 hour</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>15 minute</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td></td>
<td>8 hour</td>
<td>10 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
Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection
Wear appropriate chemical resistant gloves.

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

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

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
When using do not smoke. 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
Viscous. Liquid.

Physical state
Liquid.

Form
Viscous. Liquid.

Colour
Grey.

Odour
Slight.

Odour threshold
Not available.

pH
Not available.

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

Initial boiling point and boiling range
320 °C (608 °F) estimated

Flash point
129.4 °C (265.0 °F) 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.
Vapour pressure: 0.00005 hPa estimated
Vapour density: Not available.
Relative density: Not available.
Solubility(ies):
   Solubility (water): Not available.
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature: 80 °C (176 °F) 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
   Oxidising properties: Not oxidising.
   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. Sunlight. Contact with incompatible materials.
Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure:
   Inhalation: 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. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects:
Acute toxicity: Not known.

Components | Species | Test Results |
--- | --- | ---
BENZOYL PEROXIDE (CAS 94-36-0)
   Acute | Rat | 7710 mg/kg
DIISODECYL PHTHALATE (DIDP) (CAS 26761-40-0)
   Acute | Rabbit | > 3160 mg/kg
   Inhalation | Rat | > 12.54 mg/l, 4 Hours
   Oral | Rat | 64000 mg/kg
Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye irritation.

Respiratory or skin sensitisation

Canada - Alberta OELs: Irritant
- BENZOYL PEROXIDE (CAS 94-36-0): Irritant
- Titanium dioxide (CAS 13463-67-7): Irritant

Respiratory sensitisation: Not a respiratory sensitizer.
Skin sensitisation: 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

ACGIH Carcinogens
- BENZOYL PEROXIDE (CAS 94-36-0): A4 Not classifiable as a human carcinogen.
- Titanium dioxide (CAS 13463-67-7): A4 Not classifiable as a human carcinogen.

Canada - Manitoba OELs: carcinogenicity
- BENZOYL PEROXIDE (CAS 94-36-0): Not classifiable as a human carcinogen.
- Titanium dioxide (CAS 13463-67-7): Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity
- BENZOYL PEROXIDE (CAS 94-36-0): 3 Not classifiable as to carcinogenicity to humans.
- Titanium dioxide (CAS 13463-67-7): 2B Possibly carcinogenic to humans.

Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure: Not classified.
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): BENZOYL PEROXIDE 3.46
Mobility in soil: No data available.
Other adverse effects: The product contains volatile organic compounds which have a photochemical ozone creation potential.

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. D001: Waste Flammable material with a flash point <140 F
Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging: Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG: Not regulated as dangerous goods.
IATA

UN number: UN3082
UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (BENZOYL PEROXIDE)
Transport hazard class(es):
   Class: 9
   Subsidiary risk: -
   Packing group: III
   Environmental hazards: Yes
   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. (BENZOYL PEROXIDE), MARINE POLLUTANT
Transport hazard class(es):
   Class: 9
   Subsidiary risk: -
   Packing group: III
   Environmental hazards: Yes
   Marine pollutant: Yes
   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: Not established.

15. Regulatory information

Canadian regulations:
   Controlled Drugs and Substances Act: Not regulated.

Material name: PLEXUS® MA830/832 EU Gray Activator
IT258 Version #: 01 Issue date: 04-April-2019
Export Control List (CEPA 1999, Schedule 3)
Not listed.

Greenhouse Gases
Not listed.

Precursor Control Regulations
Not regulated.

International regulations

Stockholm Convention
Not applicable.

Rotterdam Convention
Not applicable.

Kyoto Protocol
Not applicable.

Montreal Protocol
Not applicable.

Basel Convention
Not applicable.

International Inventories

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

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

16. Other information

Issue date          04-April-2019
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.