SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA 2012:
The product is not classified.

Label elements
The substance/mixture does not meet the criteria for classification and labeling.

Other hazards
Contains Methyl methacrylate, Dibenzoyl peroxide. May produce an allergic reaction.
Dust may irritate the eyes and the respiratory system. Fine particles may form explosive vapor/air mixtures.

PBT/vPvB:
No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures
The product contains: polymer and fillers.
OSHA 2012:

<table>
<thead>
<tr>
<th>%</th>
<th>CAS-No.</th>
<th>EC No.</th>
<th>REACH Reg. No:</th>
<th>Chemical name:</th>
<th>Hazard classification:</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-60</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Methylmethacrylate polymer</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>30-60</td>
<td>7439-89-6</td>
<td>231-096-4</td>
<td>01-2119462838-24-xxxx</td>
<td>Iron powder</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>5-15</td>
<td>7782-42-5</td>
<td>231-955-3</td>
<td>-</td>
<td>Graphite powder</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>0.1-&lt;1</td>
<td>80-62-6</td>
<td>201-297-1</td>
<td>-</td>
<td>Methyl methacrylate</td>
<td>Flammable Liquid Category 2</td>
<td>Skin Irritant Category 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Sensitizer Category 1B Category 3 Target organ toxicant, Single Exposure (respiratory tract irritation)</td>
</tr>
<tr>
<td>0.1-&lt;1</td>
<td>94-36-0</td>
<td>202-327-6</td>
<td>-</td>
<td>Dibenzoyl peroxide</td>
<td>Organic Peroxide Type B</td>
<td>Eye irritant Category 2A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin Sensitizer Category 1B</td>
</tr>
</tbody>
</table>

**SECTION 4: FIRST AID MEASURES**

**Description of first aid measures**

**Inhalation:**
Move into fresh air and keep at rest.

**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 bring these instructions.

**Eye contact:**
Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

**Ingestion:**
Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable take to hospital along with these instructions.

**Most important symptoms and effects, both acute and delayed**

**Symptoms/effects:**
See section 11 for more detailed information on health effects and symptoms.

**Indication of any immediate medical attention and special treatment needed**

**Medical attention/treatments:**
Treat symptomatically.
### SECTION 5: FIREFIGHTING MEASURES

**Extinguishing media**

- Extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog.
- Unsuitable extinguishing media: No specific precautions.

**Special hazards arising from the substance or mixture**

- Specific hazards: When heated and in case of fire, irritating vapors/gases may be formed.

**Advice for firefighters**

- Protective equipment for firefighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

- Protective equipment: Avoid generation and spreading of dust. Avoid contact with skin or inhalation of spillage, dust or vapor. Avoid contact with eyes. For personal protection, see section 8. (*)
- Emergency procedures: No specific recommendations. For personal protection, see section 8. (*)

**Environmental precautions**

- Environmental precautions: Avoid discharge into water courses or onto the ground.

**Methods and material for containment and cleaning up**

- Spill Cleanup Methods: Dampen spillage with water. Absorb spillage with suitable absorbent material.

**Reference to other sections**

- References: For personal protection, see section 8. For waste disposal, see section 13.

### SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling**

- Safe handling advice: Avoid inhalation of dust. Avoid contact with skin and eyes. Observe good chemical hygiene practices.
- Technical measures: Work practice should minimize contact. Avoid spreading dust.
- Technical precautions: Local exhaust is recommended.

**Conditions for safe storage, including any incompatibilities**

- Technical measures for safe storage: No special precautions.
- Storage conditions: Store in tightly closed original container.

**Specific end use(s)**

- Specific use(s): No information available.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**
## Occupational exposure limits:

<table>
<thead>
<tr>
<th>CAS-No.:</th>
<th>Chemical name:</th>
<th>As:</th>
<th>Exposure limits:</th>
<th>Type:</th>
<th>Notes:</th>
<th>References:</th>
</tr>
</thead>
<tbody>
<tr>
<td>94-36-0</td>
<td>Benzoyl peroxide</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>80-62-6</td>
<td>Methyl methacrylate</td>
<td>-</td>
<td>100 ppm</td>
<td>410 mg/m³</td>
<td>TWA</td>
<td>-</td>
</tr>
<tr>
<td>7782-42-5</td>
<td>Graphite, natural, respirable dust</td>
<td>-</td>
<td>15 mppcf</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>7782-42-5</td>
<td>Graphite, synthetic, total dust</td>
<td>-</td>
<td>15 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>7782-42-5</td>
<td>Graphite, synthetic, respirable fraction</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td>Particulates not otherwise regulated (PNOR), total dust</td>
<td>-</td>
<td>15 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td></td>
<td>Particulates not otherwise regulated (PNOR), respirable fraction</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>OSHA</td>
</tr>
<tr>
<td>94-36-0</td>
<td>Benzoyl peroxide</td>
<td>-</td>
<td>5 mg/m³</td>
<td>TWA</td>
<td>A4</td>
<td>ACGIH</td>
</tr>
<tr>
<td>80-62-6</td>
<td>Methyl methacrylate</td>
<td>-</td>
<td>50 ppm</td>
<td>TWA</td>
<td>DSEN; A4</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>100 ppm</td>
<td>STEL</td>
<td>DSEN; A4; 15min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7782-42-5</td>
<td>Graphite (all forms except graphite fibers), respirable particulate matter</td>
<td>-</td>
<td>2 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td>Particles (Insoluble or Poorly Soluble), not Otherwise Specified, respirable particles</td>
<td>-</td>
<td>3 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td>Particles (Insoluble or Poorly Soluble), not Otherwise Specified, inhalable particles</td>
<td>-</td>
<td>10 mg/m³</td>
<td>TWA</td>
<td>-</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>

**Notes:**
- A4: Not Classifiable as a Human Carcinogen.
- DSEN: Dermal Sensitization.
Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of dust. Local exhaust is recommended.

Personal protection: Personal protection equipment should be chosen according to the ANSI standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: During dust-raising work: Use respiratory equipment with particle filter, type P2.

Hand protection: Risk of contact: Wear protective gloves. Butyl rubber gloves are recommended.

Eye protection: Risk of contact: Wear goggles/face shield.

Skin protection: No special precautions.

Environmental Exposure Controls: Not available.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

(*)

Appearance: Fine grey-black beads
Odor: mild
pH: Not available.
Melting point: Not available.
Boiling point: Not available.
Flash point: Not available.
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Explosion limits: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative density: 1.1-1.18
Solubility: insoluble in water
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature (°F): Not available.
Decomposition temperature (°F): Not available.
Viscosity: Not available.
Explosive properties: Not available.
Oxidizing properties: Not available.

Other information

Other data: Volatile Organic Compound (VOC): <10 g/l (calculated)
SECTION 10: STABILITY AND REACTIVITY

Reactivity
Reactivity: No data available.

Chemical stability
Stability: Stable under normal temperature conditions.

Possibility of hazardous reactions
Hazardous Reactions: No data available.

Conditions to avoid
Conditions/materials to avoid: Heating. Direct sunlight.

Incompatible materials
Incompatible materials: No information available.

Hazardous decomposition products
Hazardous decomposition products: When heated and in case of fire, irritating vapors/gases may be formed.
SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.
Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.
Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.
Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization: Based on available data, the classification criteria are not met.
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
National Toxicology Program (NTP): No.
IARC Cancer Review: Group 3 for Methyl methacrylate.
IARC Cancer Review: Group 3 for Benzoyl peroxide.
OSHA: No.
Reproductive Toxicity: Based on available data, the classification criteria are not met.
STOT - Single exposure: Based on available data, the classification criteria are not met.
STOT - Repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

Inhalation: Dust may irritate throat and respiratory system and cause coughing.
Skin contact: Prolonged contact may cause redness and irritation.
Eye contact: Dust in the eyes will cause irritation.
Ingestion: May irritate and cause malaise.
Specific effects: The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
Ecotoxicity: The environmental hazard of the product is considered to be limited.

Persistence and degradability
Degradability: The product is not biodegradable.

Bioaccumulative potential
Bioaccumulative potential: No data available on bioaccumulation.

Mobility in soil
Mobility: No data available.

Results of PBT and vPvB assessment
PBT/vPvB: No information available.

Other adverse effects
No information available.
SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues: Dispose of waste and residues in accordance with local authority requirements.
RCRA: Waste number U162 (Methyl methacrylate)

Contaminated packaging: Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).

UN number

UN-No: -

UN proper shipping name

Proper Shipping Name: -

Transport hazard class(es)

Class: -

Packing group

PG: -

Environmental hazards

Marine pollutant: -

Environmentally Hazardous substance: -

Special precautions for user

Special precautions: None known.

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

Transport in bulk: Not relevant.
SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Special provisions: State and local regulation may apply.

TSCA: Listed.

NFPA Rating: Health: 1  Fire: 1  Reactivity: 0  Other:-

SARA Section 302: No.
SARA Section 304: Yes.
SARA Section 313: Yes.
SARA (311/312) Hazard categories: No.
CAA: Yes. (Methyl methacrylate)

National regulation: The following lists have been checked:
Threshold Limit Values (2018), ACGIH, by the American Conference on Governmental Industrial Hygienists.
NIOSH Pocket Guide to Chemical Hazards.
The Code of Federal Regulation, Title 40, part 261.33. Identification and listing of hazardous waste.
SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 6, 9. The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Allan Vorup

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.