1. Product and Company Identification

Company: BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Synonyms: Nylon 66

2. Hazards Identification

Emergency overview

CAUTION:
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
INGESTION MAY CAUSE GASTRIC DISTURBANCES.
Use with local exhaust ventilation.
Wear a NIOSH-certified (or equivalent) particulate respirator.
Wear NIOSH-certified chemical goggles.
Wear protective clothing.
Eye wash fountains and safety showers must be easily accessible.

State of matter: solid
Colour: various, depending on the colourant
Odour: garlic-like

Potential health effects

Primary routes of exposure:
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:
Contact with molten product may cause thermal burns. The resin in pelleted form poses a low hazard.

Irritation / corrosion:
Thermal decomposition products of the substance can irritate the eyes, skin, and respiratory tract. Ingestion may cause gastrointestinal irritation, nausea, vomiting, diarrhea, weakness, and dizziness.

Sensitization:
Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Chronic toxicity:
Carcinogenicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Genotoxicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Signs and symptoms of overexposure:
No significant reaction of the human body to the product known.
No hazard is expected under intended use and appropriate handling.

Potential environmental effects

Aquatic toxicity:
The product has not been tested. The statement has been derived from the structure of the product. There is a high probability that the product is not acutely harmful to aquatic organisms.

Degradation / environmental fate:
The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content (W/W)</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-17-3</td>
<td>&gt;= 50.0 - &lt;= 70.0 %</td>
<td>polyamide (PA 6T/6)</td>
</tr>
<tr>
<td>7723-14-0</td>
<td>&gt;= 15.0 - &lt;= 30.0 %</td>
<td>Glass, oxide, chemicals</td>
</tr>
<tr>
<td>26355-78-2</td>
<td>&gt;= 3.0 - &lt;= 7.0 %</td>
<td>red phosphorus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-Propenoic acid, polymer with butyl 2-propenoate and ethene</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Consult a physician.

If on skin:
Burns caused by molten material require hospital treatment.

If in eyes:
If irritation develops, seek medical attention. In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water.

If swallowed:
Ingestion is not likely in the available physical form. If ingested, seek medical attention. Consult a physician.

5. Fire-Fighting Measures

Flash point: not applicable
Autoignition: > 470 °C (ASTM D1929)
Lower explosion limit: The substance / product decomposes therefore not determined.
Flammability: not self-igniting
Self-ignition temperature: not self-igniting
Suitable extinguishing media:
water spray, foam, dry powder

Hazards during fire-fighting:
carbon monoxide, hydrogen cyanide, Phosphine, can be emitted at > 350 °C
Under special fire conditions traces of other toxic substances are possible. Formation of further decomposition
and oxidation products depends upon the fire conditions.

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Cleanup:
For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Pick up with suitable appliance and dispose of.

Further information:
High risk of slipping due to leakage/spillage of product.

7. Handling and Storage

Handling

General advice:
Provide suitable exhaust ventilation at the drying process and in the area surrounding the melt outlet of
processing machines. Closed containers should only be opened in well-ventilated areas. Ensure thorough
ventilation of stores and work areas.

Any short stoppages in production, it is recommended that you inject material into the mould not purge an air
shot. Any molten material drooling from the machine nozzle or hot runner nozzles can self-ignite when in open
atmosphere.
It is therefore advisable to dispose of purgings etc into water containers.

Protection against fire and explosion:
Take precautionary measures against static discharges.

Handling of hot melt may produce small flame-up conditions. Hot melt should be placed in cool water
immediately if flame-up occurs.

Storage

General advice:
Keep container tightly closed. Avoid deposition of dust. Protect against moisture.

Storage stability:
Protect against moisture.

8. Exposure Controls and Personal Protection

Components with occupational exposure limits
Glass, oxide, chemicals
ACGIH  TWA value 5 mg/m³  Inhalable fraction; TWA value 1 fibers/cm³ Fiber; TWA value 0.2 fibers/cm³ Fiber;

Advice on system design:
Ensure adequate ventilation. Local exhaust ventilation preferred.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) particulate respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. Wear the following respiratory protection if exposure limit for phosphine may be exceeded: Wear a NIOSH-certified (or equivalent) supplied-air respirator.

Hand protection:
Wear gloves to prevent contact during mechanical processing and/or hot melt conditions.

Eye protection:
Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:
No special precautions necessary. Remove contaminated clothing.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>granules</td>
</tr>
<tr>
<td>Odour</td>
<td>garlic-like</td>
</tr>
<tr>
<td>Colour</td>
<td>various, depending on the colourant</td>
</tr>
<tr>
<td>pH value</td>
<td>not applicable</td>
</tr>
<tr>
<td>Melting range</td>
<td>280 - 300 °C (DIN 53765)</td>
</tr>
<tr>
<td>Boiling range</td>
<td>The substance / product decomposes</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>1.30 - 1.40 g/cm³ (20 °C) (EN ISO 1183-1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available.</td>
</tr>
<tr>
<td>Bulk density</td>
<td>500 - 800 kg/m³</td>
</tr>
<tr>
<td>Vapour density</td>
<td>not applicable</td>
</tr>
<tr>
<td>Partitioning coefficient n-octanol/water (log Pow)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>not applicable, the product is a solid</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>insoluble</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Conditions to avoid:
Temperature: > 350 degrees Celsius

Substances to avoid:
No substances known that should be avoided.

Decomposition products:
Hazardous decomposition products: carbon monoxide, hydrogen cyanide, Phosphine

Thermal decomposition:
> 350 °C
11. Toxicological information

Acute toxicity

Information on: red phosphorus
Assessment of acute toxicity:
Inhalation may cause systemic effects.

Repeated dose toxicity

Information on: red phosphorus
Assessment of repeated dose toxicity:
May affect the liver and kidneys as indicated in animal studies.

Carcinogenicity

Information on: Glass, oxide, chemicals
EU-classification Results from poorly documented long-term studies in rats indicated a carcinogenic potential. IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). NTP listed carcinogen

Aspiration Hazard:

No aspiration hazard expected.

Other Information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

12. Ecological Information

Degradability / Persistence
Biological / Abiological Degradation

Evaluation: Experience shows this product to be inert and non-degradable.

Bioaccumulation

The product will not be readily bioavailable due to its consistency and insolubility in water.

13. Disposal considerations

Waste disposal of substance:
Check for possible recycling. Incinerate in suitable incineration plant, observing local authority regulations.

Container disposal:
Packs must be completely emptied. Completely emptied packagings can be given for recycling.
14. Transport Information

Land transport
USDOT
Not classified as a dangerous good under transport regulations

Sea transport
IMDG
Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO
Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations
Registration status:
Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Not hazardous;

<table>
<thead>
<tr>
<th>CERCLA RQ</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 LBS</td>
<td>7723-14-0</td>
<td>red phosphorus</td>
</tr>
</tbody>
</table>

State regulations

<table>
<thead>
<tr>
<th>State RTK</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA, NJ, PA</td>
<td>65997-17-3</td>
<td>Glass, oxide, chemicals</td>
</tr>
<tr>
<td>NJ, PA</td>
<td>7723-14-0</td>
<td>red phosphorus</td>
</tr>
</tbody>
</table>

16. Other Information

Recommended use: Polymer for industrial processing only
Suitable for use in industrial sector: Polymers industry;

HMIS III rating
Health: 3 Flammability: 1 Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

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fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

MSDS Prepared by:
BASF NA Product Regulations

MSDS Prepared on: 2013/01/17

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