1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Trade Name: NORYL®
Product Name: GFN3-701-0
Product Description: Modified Polyphenyleneoxide (CAS# 25134-01-4), glass fiber filled

Recommended use: May be used to produce molded or extruded articles or as a component of other industrial products.

Company: SABIC Innovative Plastics B.V.
Plasticslaan 1
P.O. Box 117
4600 AC Bergen op Zoom
The Netherlands

Emergency Telephone Number: (31) 164-292911 (24/24) Bergen op Zoom

2. HAZARDS IDENTIFICATION

Skin contact: Contact causes skin irritation
Eye Contact: Resin particles, like other inert materials, are mechanically irritating to eyes.
Inhalation: Irritating to respiratory system
Ingestion: Pellet ingestion unlikely due to physical form

Other Information: Cool skin rapidly with cold water after contact with molten material. Heating can release hazardous gases. Hazardous fumes can also occur in post-processing operations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 99/45/EC
4. FIRST AID MEASURES

Inhalation: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. If symptoms persist, call a physician.

Skin Contact: Wash off immediately with soap and plenty of water. Cool skin rapidly with cold water after contact with hot polymer. Consult a physician.

Eye Contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists, consult a specialist.

Ingestion: No hazards which require special first aid measures.

Precautions: Cool molten product on skin with plenty of water. Do not remove solidified product. Do not peel polymer from the skin.

5. FIRE-FIGHTING MEASURES

Autoignition Temperature: 490°C (914°F), estimated

Explosive Limits
- upper: Not determined
- lower: Not determined

Suitable Extinguishing Media: Water spray mist or foam.

Extinguishing media which must not be used for safety reasons: Carbon dioxide (CO2), Dry chemical

Hazardous decomposition products: Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbons fragments

Special Protective Equipment for Firefighters: In the event of fire, wear self-contained breathing apparatus (NEN-EN137).

Specific Hazards: Take precautionary measures against static discharges. During processing, dust may form explosive mixture in air. Thermal decomposition can lead to release of irritating gases and vapors.

6. ACCIDENTAL RELEASE MEASURES

Clean up: Sweep up and shovel into suitable containers for disposal. Do not create a powder cloud by using a brush or compressed air.

Personal Precautions: See section 8.

Environmental Precautions: Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice. Provide for appropriate exhaust ventilation and dust collection at machinery. Avoid dust formation. All metal parts of the mixing and processing equipment must be earthed.

Storage: Keep tightly closed in a dry and cool place. Keep away from heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
Engineering Measures to Reduce Exposure: In the case of hazardous fumes, wear self-contained breathing apparatus. Wear face-shield and protective suit for abnormal processing problems. Handle in accordance with good industrial hygiene and safety practice for diagnostics. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Hand Protection: Protective gloves, NEN-EN 374
Eye Protection: Safety glasses with side-shields (NEN-EN 165-166)
Respiratory Protection: In the case of hazardous fumes, wear self-contained breathing apparatus in case of insufficient ventilation wear suitable respiratory equipment (NEN-EN149)
Skin and Body Protection: Long sleeved clothing (NEN-EN 340-369-465)
Hygiene Measures: When using, do not eat, drink or smoke.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Pellets</td>
</tr>
<tr>
<td>Color:</td>
<td>Various</td>
</tr>
<tr>
<td>Odor:</td>
<td>Slight</td>
</tr>
<tr>
<td>Melting point/range:</td>
<td>Various</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>490°C (914°F) estimated</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Negligible</td>
</tr>
<tr>
<td>Water Solubility:</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Negligible</td>
</tr>
<tr>
<td>Specific gravity:</td>
<td>&gt; 1; (water =1)</td>
</tr>
<tr>
<td>VOC content(%):</td>
<td>Negligible</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td>Not determined</td>
</tr>
<tr>
<td>upper:</td>
<td>Not determined</td>
</tr>
<tr>
<td>lower:</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions. Hazardous polymerisation does not occur.

Conditions to Avoid: To avoid thermal decomposition, do not overheat. Heating can release hazardous gases. Avoid temperatures above 490 °C without adequate ventilation.

Hazardous Decomposition Products: Traces of, styrene, toluene, styrene dimers, aliphatic amines, aldehydes and alcohols, ethylbenzene and 4-vinylcyclohexene
11. TOXICOLOGICAL INFORMATION

LD50/oral/rat: >5000 mg/kg
LD50/dermal/rabbit: >2000 mg/kg
Subchronic Toxicity: No data available
Primary Irritation: Skin irritation
Remarks: The toxicological data has been taken from products of similar composition

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects: Do not flush into surface water or sanitary sewer system.
Other Information: Ecological damages are not known or expected under normal use.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Where possible recycling is preferred to disposal or incineration. Dispose of in accordance with local regulations.
EWC waste disposal no: 702 - waste from the mfsu of plastics, synthetic rubber and man-made fibres

14. TRANSPORT INFORMATION

Transport Classification: Not regulated as hazardous for shipment, unless noted below, under current transportation guidelines.

ADR/RID/ADNR
IMDG
ICAO
IATA-DGR

15. REGULATORY INFORMATION

This substance is classified and labelled according to Annex I of Directive 67/548/EEC, as amended.

R -phrase(s)
S -phrase(s)
Text of R Phrases mentioned in Section 3

NORYL® is a registered trademark of SABIC Innovative Plastics BV

Prepared by: Product Stewardship & Toxicology

This publication provides information and guidelines for safe handling and processing of SABIC Innovative Plastics' resins and is based on currently available experience and knowledge. It is not designed as a comprehensive product performance data sheet, nor as a guide to application possibilities of our materials. Users should follow all applicable local regulations governing Health and Safety at work, and are requested to pass this publication on to all relevant employees and customers.

End of Material Safety Data Sheet