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## MATERIAL SAFETY DATA SHEET **PA6 G20 H UF black**

Version Number 1.0 Revision Date 10/15/2012

Page 1 of 8 Print Date 10/15/2012

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

| Telephone<br>Emergency telephone<br>number | : | 1 (440) 930-1000 or 1 (866) POLYONE<br>CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure<br>or accident). |
|--|---|--|
| Product name                               | : | PA6 G20 H UF black   |
| Product code                               | : | EM10006907   |
| Chemical Name                              | : | Mixture  |
| CAS-No.                                    | : | Mixture  |
| Product Use                                | : | Industrial Applications  |

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Components   | CAS-No.    | Weight percent |
|--------------|------------|----------------|
| Glass, oxide | 65997-17-3 | 10 - 30        |
| Carbon black | 1333-86-4  | 1 - 5          |
| Talc         | 14807-96-6 | 1 - 5          |

#### 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure.

#### POTENTIAL HEALTH EFFECTS

| Routes of Exposure:                     | : Inhalation, Ingestion, Skin contact  |
|---|--|
| Acute exposure                          |  |
| Inhalation<br>Ingestion<br>Eyes<br>Skin | <ul> <li>Particulates, like other inert materials can be mechanically irritating.</li> <li>May be harmful if swallowed.</li> <li>Particulates, like other inert materials can be mechanically irritating.</li> <li>Experience shows no unusual dermatitis hazard from routine handling.</li> </ul> |
| Chronic exposure                        | : Refer to Section 11 for Toxicological Information.   |

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# MATERIAL SAFETY DATA SHEET **PA6 G20 H UF black**

Version Number 1.0 Revision Date 10/15/2012 Page 2 of 8 Print Date 10/15/2012

| Medical Conditions<br>Aggravated by Exposure:   | : None known.  |
|---|--|
|   | 4. FIRST AID MEASURES  |
| Inhalation  | : Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases o doubt seek medical advice.   |
| Ingestion   | : Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice.   |
| Eyes  | : Rinse immediately with plenty of water, also under the eyelids, for a least 15 minutes. If eye irritation persists, seek medical attention.  |
| Skin  | : Wash off with soap and plenty of water. If skin irritation persists seek medical attention.  |
|   | 5. FIREFIGHTING MEASURES   |
| Flash point   | : not applicable   |
| Flammable Limits<br>Upper explosion limit<br>Lower explosion limit<br>Auto-ignition temperature<br>Suitable extinguishing media<br>Special Fire Fighting<br>Procedures<br>Unusual Fire/Explosion<br>Hazards | <ul> <li>not applicable</li> <li>not applicable</li> <li>not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.</li> </ul> |
|   | 6. ACCIDENTAL RELEASE MEASURES   |
| Personal precautions  | : Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.   |
| Environmental precautions   | : Should not be released into the environment. The product should no be allowed to enter drains, water courses or the soil.  |
| Methods for cleaning up   | : Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal.  |
|   | 7. HANDLING AND STORAGE  |
| Handling  | : Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.  |

POLYONE CORPORATION



# MATERIAL SAFETY DATA SHEET **PA6 G20 H UF black**

Version Number 1.0 Revision Date 10/15/2012 Page 3 of 8 Print Date 10/15/2012

Storage

: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Respiratory protection            | No personal respiratory protective equipment norma  | ally required. |
|-----------------------------------|---|----------------|
| Eye/Face Protection               | Safety glasses with side-shields  |                |
| Hand protection                   | Protective gloves   |                |
| Skin and body protection          | Long sleeved clothing   |                |
| Additional Protective<br>Measures | Safety shoes  |                |
| General Hygiene<br>Considerations | Handle in accordance with good industrial hygiene practice. Wash hands before breaks and at the end | •              |
| Engineering measures              | Heat only in areas with appropriate exhaust ventilat appropriate exhaust ventilation at machinery.  | ion. Provide   |
|                                   |   |                |

Exposure limit(s)

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## MATERIAL SAFETY DATA SHEET PA6 G20 H UF black

Version Number 1.0 Revision Date 10/15/2012 Page 4 of 8 Print Date 10/15/2012

| Components   | Value     | Exposure time                        | Exposure type        | List:    |
|--------------|-----------|--------------------------------------|----------------------|----------|
| Carbon black | 3.5 mg/m3 | Recommended exposure<br>limit (REL): |                      | NIOSH    |
|              | 0.1 mg/m3 | Recommended exposure limit (REL):    |                      | NIOSH    |
|              | 3.5 mg/m3 | PEL:                                 |                      | OSHA Z1  |
|              | 3.5 mg/m3 | Time Weighted Average (TWA):         |                      | OSHA Z1A |
|              | 3.5 mg/m3 | Time Weighted Average (TWA):         |                      | MX OEL   |
|              | 7 mg/m3   | Short Term Exposure Limit (STEL):    |                      | MX OEL   |
|              | 3 mg/m3   | Time Weighted Average (TWA):         | Inhalable fraction.  | ACGIH    |
| Talc         | 2 mg/m3   | Time Weighted Average (TWA):         | Respirable fraction. | ACGIH    |
|              | 2 mg/m3   | Recommended exposure limit (REL):    | Respirable.          | NIOSH    |
|              | 2 mg/m3   | Time Weighted Average (TWA):         | Respirable dust.     | OSHA Z1A |
|              | 0.1 mg/m3 | Time Weighted Average<br>(TWA):      | Respirable.          | Z3       |
|              | 0.3 mg/m3 | Time Weighted Average<br>(TWA):      | Total dust.          | Z3       |

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility

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#### : solid : pellets, Slabs : BLACK : very faint Not determined not applicable

:

:

: insoluble

Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pН

- : Not applicable Not determined : Not established : not applicable :
- : not applicable
- not applicable :

#### **10. STABILITY AND REACTIVITY**

| 1 | Stability                        | : | The product is stable if stored and handled as prescribed.   |
|---|----------------------------------|---|--|
|   | Hazardous Polymerization         | : | Will not occur.  |
|   | Conditions to avoid              | : | To avoid thermal decomposition, do not overheat.   |
|   | Incompatible Materials           | : | Strong acids, oxidizing and reducing agents  |
|   | Hazardous decomposition products | : | Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. |

#### **11. TOXICOLOGICAL INFORMATION**

# MATERIAL SAFETY DATA SHEET **PA6 G20 H UF black**

Version Number 1.0 Revision Date 10/15/2012

Page 5 of 8 Print Date 10/15/2012

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

#### Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

| CAS-No.    | Chemical Name | Effect           | Target Organ                       |
|------------|---------------|------------------|------------------------------------|
| 1333-86-4  | Carbon black  | Systemic effects | Eyes, Respiratory system.          |
| 14807-96-6 | Talc          | Systemic effects | Eyes, Respiratory system,<br>Skin. |

#### LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:

| CAS-No.   | Chemical Name | Route       | Value         | Species |
|-----------|---------------|-------------|---------------|---------|
| 1333-86-4 | Carbon black  | Oral LD50   | >15,400 mg/kg | rat     |
|           |               | Dermal LD50 | > 3 gm/kg     | rabbit  |

Carcinogenicity

This product contains the following components which, in their pure form, have the following carcinogenicity data:

| CAS-No.    | Chemical Name | OSHA | IARC | NTP |
|------------|---------------|------|------|-----|
| 14807-96-6 | Talc          | no   | 2B   | no  |

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

2B - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

1 - The component is known to be a human carcinogen.

2 - The component is reasonably anticipated to be a human carcinogen.

#### Additional Health Hazard Information:

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

#### **12. ECOLOGICAL INFORMATION**

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# MATERIAL SAFETY DATA SHEET **PA6 G20 H UF black**

| sion Number 1.0<br>ision Date 10/15/2012 | Page 6<br>Print Date 10/15/2  |
|--|---|
| Persistence and degradability            | : Not readily biodegradable.  |
| Environmental Toxicity                   | : Chemicals are not readily available as they are bound within the polymer matrix.  |
| Bioaccumulation Potential                | : Chemicals are not readily available as they are bound within the polymer matrix.  |
| Additional advice                        | : not applicable  |
|  | 13. DISPOSAL CONSIDERATIONS   |
| Product                                  | : Like most thermoplastic plastics the product can be recycled. Where possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations. |
| Contaminated packaging                   | : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.  |
|  | 14. TRANSPORT INFORMATION   |
| U.S. DOT Classification                  | : Not regulated for transportation.   |
| ICAO/IATA                                | : Refer to specific regulation.   |
| IMO/IMDG (maritime)                      | : Refer to specific regulation.   |
|  | 15. REGULATORY INFORMATION  |
| US Regulations:                          |   |
| OSHA Status                              | : Classified as hazardous based on components.  |
| TSCA Status                              | : All components of this product are listed on or exempt from the TSCA Inventory.   |
| US. EPA CERCLA Hazardous                 | Substances (40 CFR 302)   |
| not applicable                           |   |
| California Proposition<br>65             | : Not applicable  |
|  |   |

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# MATERIAL SAFETY DATA SHEET **PA6 G20 H UF black**

Version Number 1.0 Revision Date 10/15/2012 Page 7 of 8 Print Date 10/15/2012

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

| Chemical Name  | CAS-No.    | Weight percent |
|----------------|------------|----------------|
| ZINC COMPOUNDS | 557-05-1   | 0.10 - 1.00    |
| ZINC COMPOUNDS | 12767-90-7 | 1.00 - 5.00    |

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

| Chemical Name               | CAS-No.    | Weight      | NPRI ID# |
|-----------------------------|------------|-------------|----------|
|                             |            | percent     |          |
| Zinc stearate               | 557-05-1   | 0.10 - 1.00 |          |
| Boron zinc oxide (B6Zn2O11) | 12767-90-7 | 1.00 - 5.00 |          |

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

| CAS-No.   |  |
|-----------|--|
| 1333-86-4 |  |

DSL

: DSL status has not been determined. Quantity use in Canada may be restricted by regulations.

National Inventories:

| Australia AICS | : | Not determined |
|----------------|---|----------------|
| China IECS     | : | Not determined |
| Europe EINECS  | : | Listed         |
| Japan ENCS     | : | Not determined |
|                |   |                |

Korea KECI : Not determined

Philippines PICCS : Not determined

#### **16. OTHER INFORMATION**



# MATERIAL SAFETY DATA SHEET **PA6 G20 H UF black**

Version Number 1.0 Revision Date 10/15/2012

Page 8 of 8 Print Date 10/15/2012

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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.