Safety Data Sheet
ULTRAMID® 8351HS BK106 POLYAMIDE

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: POLYAMIDE RESIN

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: odourless

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:
Irritation is possible when the product comes in contact with the skin, respiratory tract or the eyes.

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

CAS Number	Content (W/W)	Chemical name
25038-54-4	>= 60.0 - <= 80.0 %	polyamide (PA 6)
28516-43-0	>= 15.0 - <= 30.0 %	2-Propenoic acid, 2-methyl-, polymer with ethene, zinc salt
9010-86-0	>= 1.0 - <= 5.0 %	2-Propenoic acid, ethyl ester, polymer with ethene
1333-86-4	>= 1.0 - <= 5.0 %	carbon black

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:	> 400 °C	(ASTM D1929)
Lower explosion limit:		The substance / product decomposes therefore not determined.
:		not applicable, the product does not form flammable aerosoles)
Flammability:	not self-igniting	
Self-ignition temperature:		not self-igniting

Suitable extinguishing media:
water spray, foam, dry powder

Hazards during fire-fighting:
Ammonium hydroxide, carbon monoxide, carbon dioxide, caprolactam, hydrogen cyanide, nitriles can be emitted at > 320 °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

Personal precautions:
No special precautions necessary.

Environmental precautions:
This product is not regulated by RCRA. This product is not regulated by CERCLA ('Superfund').

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

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

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

carbon black	OSHA PEL	PEL 3.5 mg/m3 ;
	ACGIH TLV	TWA value 3.5 mg/m3 ;

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) particulate respirator. Wear respiratory protection if ventilation is inadequate.

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

Eye protection:
Tightly fitting safety goggles (chemical goggles).

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

General safety and hygiene measures:
Avoid inhalation of dust.

9. Physical and Chemical Properties

Form:	pellets	
Odour:	odourless	
Colour:	various, depending on the colourant	
pH value:		not applicable
Melting temperature:	approx. 220 °C	(DIN 53765)
Boiling range:		The substance / product decomposes therefore not determined.
Vapour pressure:		not applicable
Density:	1.00 - 1.20 g/cm3	(20 °C) (EN ISO 1183-1)
Relative density:		No data available.
Bulk density:	500 - 800 kg/m3	
Vapour density:		not applicable
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Viscosity, kinematic:		not applicable, the product is a solid
Solubility in water:		insoluble

10. Stability and Reactivity

Conditions to avoid:
Temperature: > 320 degrees Celsius

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

Decomposition products:
Hazardous decomposition products: Ammonium hydroxide, carbon monoxide, carbon dioxide, caprolactam, hydrogen cyanide, nitriles

Thermal decomposition:
> 320 °C (TGA)

11. Toxicological information

Repeated dose toxicity

Information on: carbon black
Assessment of repeated dose toxicity:
Chronic exposures have been known to produce pneumoconiosis (chronic inflammatory and fibrotic lung disease). The substance may cause increase in lung mass and lung tissue changes after repeated inhalation. Repeated oral uptake of the substance did not cause substance-related effects. Repeated dermal uptake of the substance did not cause substance-related effects.

Genetic toxicity

Information on: carbon black
Results from a number of mutagenicity studies with microorganisms and mammalian cell culture are available. Taking into account all of the information, there is no indication that the substance is mutagenic.
The substance was genotoxic in a test with mammals. The effect may result from a secondary mechanism.

Carcinogenicity

Information on: Carbon Black
IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). A clear indication of an increased risk of cancer in humans has so far not been shown. In long-term animal studies in which the substance was given by inhalation in high concentrations, a carcinogenic effect was observed.

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;

EPCRA 313:

CAS Number	Chemical name
28516-43-0	2-Propenoic acid, 2-methyl-, polymer with ethene, zinc salt

State regulations

State RTK	CAS Number	Chemical name
NJ	28516-43-0	2-Propenoic acid, 2-methyl-, polymer with ethene, zinc salt
MA, NJ, PA	1333-86-4	carbon black

CA Prop. 65:
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

16. Other Information

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

NFPA Hazard codes:
Health : 1 Fire: 1 Reactivity: 0 Special:

HMIS III rating
Health: 1 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.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible 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.

SDS Prepared by:

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END OF DATA SHEET