

SAFETY DATA SHEET

North America U.S. GHS Format

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1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Trademark: VERTON™
Product Code: RX10409D - BK1A870

Product Description: Polyamide 66 [CASRN 32131-17-2] glass fiber filled

Product Type: Commercial Product

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

Company: SABIC Innovative Plastics US LLC
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2. HAZARDS IDENTIFICATION

The additives in this product (if any) are bound in a thermoplastic resin matrix. In accordance with GHS for the classification of the product, the hazard potential may be assessed with respect to the physico-chemical form and/or bioavailability of the individual components in the thermoplastic resin.

Where GHS classifications are shown below, these are based on the individual components in the thermoplastic resin matrix. Under the typical use conditions for the resin, these hazardous components are unlikely to contribute to workplace exposure. Please read the entire safety data sheet and/or consult an EHS professional for a complete understanding.

Classification

OSHA Regulatory Status

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Combustible dust	Yes
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GHS-Labeling

Emergency Overview

Warning

May form combustible dust concentrations in air

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance: Powder

Physical State: Solid

Odor: None or slight

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable

Other hazards which do not result in classification:

SABIC Emergency Overview

- Powder with slight or no odor
- Spilled material may create slipping hazard
- Can burn in a fire creating dense, toxic smoke
- Molten plastic can cause severe thermal burns
- Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Severe over-exposure may result in nausea, headache, chills, and fever. See below for additional effects.
- Powder can cause mechanical irritation if dusts are generated.
- Take precautionary measures against static discharges. During processing, dust may form explosive mixture in air.
- **WARNING! FORMS COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING HANDLING AND PROCESSING)**

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.

Processing Issues:

Processing vapors may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur. Grease-like processing vapor condensates on ventilation ductwork, molds, and other surfaces can cause irritation and injury to skin.

Aggravated Medical Conditions:

MEDICAL RESTRICTIONS: There are no known health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing vapors.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Type Mixture

HAZARDOUS COMPONENTS:

Chemical Name	CAS Number	Weight %	GHS Classification (EC) No. 1272/2008 [CLP]:
Fiberglass, EU/GHS classified	65997-17-3	30 - 70	Carc.2 (H351)
Maleic anhydride	108-31-6	1 - 5	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Resp. Sens. 1 (H334) Skin Sens. 1 (H317)
Carbon black	1333-86-4	0.1 - 0.3	
Potassium bromide	7758-02-3	0.1 - 0.3	

The non-hazardous components and exact percentage (concentration) of the composition have been withheld as a trade secret.

This product consists primarily of high molecular weight polymers which are not expected to be hazardous. The ingredients in this product are present within the polymer matrix and are not expected to be hazardous.

4. FIRST AID MEASURES

If Inhalation: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Artificial respiration and/or oxygen may be necessary. If symptoms persist, call a physician.

On skin contact: Immediately cool the skin by rinsing with cold water after contact with hot material. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

On contact with eyes: 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.

On ingestion: No hazards which require special first aid measures.

Precautions: Processing vapors inhalation may be irritating to the respiratory tract. If symptoms are experienced remove victim from the source of contamination or move victim to fresh air and obtain medical advice.

5. FIRE-FIGHTING MEASURES

Autoignition Temperature:	400°C (752°F), estimated
Explosive Properties:	Material is not sensitive to mechanical impact, but is sensitive to static discharge under dust cloud conditions.
Suitable Extinguishing Media:	Water spray mist or foam.
Unsuitable Extinguishing Media for Safety Reasons:	Carbon dioxide and dry chemical are not recommended because their lack of cooling capacity may permit re-ignition.
Hazards from Combustion Products:	Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbon fragments.
Special Protective Equipment for Firefighters:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.
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. Material should not be released into the environment.

7. HANDLING AND STORAGE

Handling:	Handle in accordance with good industrial hygiene and safety practices. 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:	Store in closed container in a dry and cool area. Keep away from heat sources and sources of ignition.
Incompatible Products:	No special restrictions on storage with other products.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

No components with information, unless noted below

Chemical Name	US OSHA PEL (8 Hr)	ACGIH	Canada - Alberta (8 Hr)	Mexico OEL Data	SABIC Recommend (8 Hr)*
Fiberglass, EU/GHS classified 65997-17-3	No Information	Inhalable fraction - TWA: 5 mg/m ³ ; Notations: Not Classifiable as a Human Carcinogen ; Crit Eff: Upper respiratory tract irritation ~cr~Respirable fibers - TWA: 1 f/cc ; Notations: Not Classifiable as a Human Carcinogen Respirable fibers - Crit Eff: Upp	OEL_8 hr: 1 f/cc OEL_Ceiling: 1 f/cc	LMPE-PPT: 10 mg/m ³ polvo	No Information
Maleic anhydride 108-31-6	FRL_TWA: 1 mg/m ³ , 0.25 ppm ; TL_PEL: 1 mg/m ³ , 0.25 ppm	TWA: 0.1 ppm ; Notations: Not Classifiable as a Human Carcinogen , Sensitization ; Crit Eff: Eye irritation , Skin irritation , Upper respiratory tract irritation	OEL_8 hr: 0.4 mg/m ³ , 0.1 ppm	LMPE-PPT: 0.25 ppm , 1 mg/m ³	No Information
Carbon black 1333-86-4	FRL_TWA: 3.5 mg/m ³ ; TL_PEL: 3.5 mg/m ³	TWA: 3.5 mg/m ³ ; Notations: Not Classifiable as a Human Carcinogen	OEL_8 hr: 3.5 mg/m ³	LMPE-PPT: 3.5 mg/m ³ ; LMPE-CT: 7 mg/m ³ ; CONN: A4	No Information

*SABIC Recommended Exposure Limits have been established for certain chemicals.

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. Provide for appropriate exhaust ventilation at machinery. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, ductwork, and other surfaces using appropriate personal protection. 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 should be worn.

Eye Protection:

Safety glasses with side-shields or chemical goggles. In addition, use full-face shield when cleaning processing vapor condensates from hood, ducts, and other surfaces.

Respiratory Protection:

When using this product at elevated temperatures, implement engineering systems, administrative controls or a respiratory protection program (including a respirator approved for protection from organic vapors, acid, gases, and particulate matter) if processing vapors are not adequately controlled or operators experience symptoms of overexposure. Use a respirator approved for protection from dust.

Body Protection:

Long sleeved clothing.

Hygiene Measures:

When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Appearance:	Powder
Color:	White
Odor:	None or slight
Odor Threshold:	No information available
pH	No data available
Boiling point/range:	Not determined
Melting point/range:	313 °C, 595 °F
Autoignition Temperature:	400°C (752°F) estimated
Flash Point:	The product is not flammable
Flammability (solid, gas):	No information available
Vapor Pressure:	Negligible
Water Solubility:	Insoluble
Partition coefficient: (n-octanol/water)	No information available
Vapor Density:	Not determined
Evaporation Rate:	Negligible
Decomposition temp. (°C) :	Not determined
Specific gravity:	No information available
VOC content (%):	Negligible
Explosive Limits	
upper:	Not determined
lower:	Not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under ambient conditions. Hazardous polymerization does not occur.
Conditions to Avoid:	Avoid temperatures above 400°C. To avoid thermal decomposition, avoid elevated temperatures. Heating can result in the formation of gaseous decomposition products, some of which may be hazardous. Do not exceed melt temperature recommendations in product literature. Purgings of hot material should be collected in small, flat, thin shapes and quenched with water to allow for rapid cooling. Do not allow product to remain in barrel at elevated temperatures for extended periods of time.
Materials to avoid:	If polyacetal and polyoxymethylene resin is molded or handled in your equipment, this material can rapidly decompose at the temperatures to process this resin. Inadvertent contamination of this resin with polyacetal resin from the material handling system of other equipment can result in rapid, possibly violent, release of decomposition fumes when the contaminated material is brought to molding temperature. To avoid, thoroughly clean molding equipment with purging compound prior to product changeover and prevent cross contamination of material handling systems.
Hazardous Decomposition Products:	Process vapors under recommended processing conditions may include trace levels of hydrocarbons, N,N-dimethylformamide, maleic anhydride.
Incompatible Products:	None known.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

LD50/oral/rat:	No information available
LD50/dermal/rabbit:	No information available
Inhalation:	Powder can cause mechanical irritation if dusts are generated. Processing vapors may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur. Grease-like processing vapor condensates on ventilation duct work, molds, and other surfaces can cause irritation and injury to skin. Processing fumes may contain maleic anhydride which may cause headaches, nausea, irritation, asthma-like reactions with shortness of breath, wheezing, or cough. High overexposure to maleic anhydride may ulceration of the upper respiratory passages, pulmonary edema (body fluid in the lungs) and shortness of breath. Prompt medical attention is required. Irritating to respiratory system; avoid inhalation of dusts.
Eye Contact:	Resin particles, like other inert materials, are mechanically irritating to eyes.
Skin Contact:	Powder not likely to cause skin irritation. Contact causes skin irritation.
Ingestion:	Ingestion unlikely due to physical form.
Chronic Toxicity:	No information available.
Subchronic Toxicity:	No information available
Sensitization:	No information available on this product. Processing fumes may contain maleic anhydride, which may cause skin sensitization.
Primary Irritation:	Substance does not generally irritate and is only mildly irritating to the skin. Skin irritation.
IARC:	Not listed
OSHA:	Not regulated
NTP:	Not tested
Special Studies:	No Information Carbon Black: The International Agency for Research on Cancer (IARC) has determined that carbon black is a class 2B known animal and possible human carcinogen by the route of inhalation. Rats exposed to high doses of carbon black by inhalation developed statistically significant increases in lung fibrosis and lung tumors.

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.
Contaminated Packaging:	Empty containers should be taken for local recycling, recovery or waste disposal.
Waste Disposal:	Recycling is encouraged. Landfill or incinerate in accordance with federal, state and local requirements. Collected processing fume condensates and incinerator ash should be tested to determine waste classification.

14. TRANSPORT INFORMATION

Transport Classification:	This product is not considered a dangerous good according to the national and international legislation on dangerous goods.
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DOT

ADR/RID/ADN

IMDG

ICAO

IATA-DGR

MEXICO

CANADA/TDG

15. REGULATORY INFORMATION

International Inventories:

TSCA (USA):	Listed
DSL (Canada):	Listed
EINECS/ELINCS (Europe):	Listed
ENCS (Japan):	Listed
IECSC (China):	Listed
KECL (Korea):	Listed
PICCS (Philippines):	Listed
AICS (Australia):	Listed
NZIoC (New Zealand):	Listed

Other Inventory Information:

A "Listed" entry above means all chemical components are on the respective inventory list and/or a qualifying exemption exists for one or more components. A "Not listed" entry above indicates one or more components is restricted from import or manufacture into that country/region. Articles are exempt from registration and are therefore not listed on the national chemical inventories.

SVHC (REACH Regulation (EC) No 1907/2006 and 453/2010, as amended):

This product does not intentionally contain SVHC chemicals except as noted below. Incidental amounts of impurities, if present, would be below the threshold limit of 0.1% by weight.

SARA (313) Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

This product contains a chemical or chemicals that are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA (311, 312) hazard class:

Acute Health Hazard	N
Chronic Health Hazard	N
Fire Hazard	N
Sudden Release of Pressure Hazard	N
Reactive Hazard	N

Canada - WHMIS Classification:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR. Unless noted below, this product is non-controlled. Some classifications may not apply to the entire product.

Chemical Name	Weight %	WHMIS hazard class:
Maleic anhydride 108-31-6	1 - 5	0.1%; English Item 964; French Item 231 D1B; D2A; E

California Proposition 65:

Components in this product known to the State of California to cause cancer and/or reproductive effects, are listed below:

Chemical Name	Weight %	California Proposition 65:
Fiberglass, EU/GHS classified 65997-17-3	30 - 70	Listed: July 1, 1990 Carcinogenic. (airborne, unbound particles of respirable size)
Carbon black 1333-86-4	0.1 - 0.3	Listed: February 21, 2003 Carcinogenic. (airborne, unbound particles of respirable size)

RoHS EU Directive 2011/65/EU:

The subject product is in compliance with EU RoHS Directive 2011/65/EU. All below chemicals are not employed in the manufacture of the product: a.Cadmium and its compounds, b.Lead and its compounds, c.Mercury and its compounds, d.Hexavalent chromium compounds, e.Polybrominated biphenyls (PBBs), f.Polybrominated diphenyl ethers (PBDEs including Deca-BDE). The trace levels of heavy metals may be present as impurities within threshold limits (<0.1% for Pb, Hg, Cr VI, and <0.01% for Cd). We are disclosing this information, to the best of our knowledge, based upon data from our raw material manufacturers.

HMIS Rating

Health: 0

Flammability: 2

Reactivity: 0

16. OTHER INFORMATION

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates.

Visit our public website to search, view and print Safety Data Sheets for commercial products:
<http://eur.sabic-ip.com/ordeur/pages/msds/MSDSSearch.jsp?app=sabic-ip>

SDS Scope:

USA: Conforms to 29 CFR 1910.1200 (2012 OSHA Hazard Communication Standard)
This document is also applicable in other countries and regions.

Prepared by: Product Stewardship & Toxicology

Reason for revision: Update to GHS format

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End of Safety Data Sheet

OSHA Hazard Communication Standard Label

Product Code: RX10409D - BK1A870

WARNING: May form combustible dust concentrations in air.

Keep away from all ignition sources including heat, sparks, open flames and hot surfaces.

Prevent dust accumulations to minimize explosion hazard.

See section 8.

Note: Please read the entire safety data sheet and/or consult an EHS professional for a complete understanding.

Emergency Telephone Number (United States): 800/447-4545

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