



SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 and 453/2010 (REACH)

Print date: 15-May-2015

Revision Number: 2

Revision date: 12-May-2015

1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

| | |
|---|---|
| Trademark: | VALOX™ |
| Product Code: | V9561 - 1001 |
| Product Description: | Poly (ethylene terephthalate) [CASRN 25038-59-9] 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 B.V. Plasticslaan 1 P.O. Box 117 4600 AC Bergen op Zoom The Netherlands |
| Manufacturer: | SABIC Innovative Plastics B.V. Plasticslaan 1 P.O. Box 117 4600 AC Bergen Op Zoom The Netherlands |
| Emergency Telephone Number: | Bergen op Zoom +31(0)164-292911 (24/24) |
| Emergency Transportation/CHEMTREC (24 HOUR): | 800 424-9300 (USA) +1 703-527-3887 (globally, outside USA) |
| E-mail: | webinquiries@sabic-ip.com |
| Website Address: | www.sabic-ip.com |

2. HAZARDS IDENTIFICATION

The additives in this product 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 of the substance or mixture

REGULATION (EC) No 1272/2008

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Chronic aquatic toxicity

• Category 3

CLP/GHS-Labeling

Hazard Statements

- Harmful to aquatic life with long lasting effects

Precautionary Statements

- P273 - Avoid release to the environment
- P501 - Dispose of contents/container to an approved waste disposal plant

Prevention

Avoid release to the environment.

Disposal

- Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification:

SABIC Emergency Overview

- Pellets 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.
- Secondary operations, such as grinding, sanding, or sawing can produce dust which may present an explosion or respiratory hazard.

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 % | Classification (67/548/EEC): | GHS Classification (EC) No. 1272/2008 [CLP]: |
|-------------------------------|------------|----------|---------------------------------|--|
| Fiberglass, EU/GHS classified | 65997-17-3 | 10-30 | Classification: Carc.Cat.3; R40 | Carc. 2 (H351) |

For the full text of the H-phrases, if mentioned in this section, see Section 16.

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 If symptoms persist, call a physician |
| On skin contact: | Wash off immediately with soap and plenty of water Immediately cool the skin by rinsing with cold water after contact with hot material Consult 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: | 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: | 630°C (1166°F) estimated |
| Explosive Limits upper: | Not determined |
| lower: | Not determined |
| Suitable Extinguishing Media: | Use dry chemical, CO ₂ , water spray or "alcohol" foam. Water is the best extinguishing medium. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition on larger resin fires (blobs, drools, etc.) |
| Unsuitable Extinguishing Media for Safety Reasons: | Do not use a solid water stream as it may scatter and spread fire |
| Hazardous Decomposition Products: | Fire will produce dense black smoke containing hazardous combustion products carbon oxides hydrocarbons fragments hydrogen fluoride carbonyl fluoride fluorocarbons hydrogen bromide |
| Hazards from Combustion Products: | Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbon fragments, brominated hydrocarbons. |
| Special Protective Equipment for Firefighters: | In the event of fire, wear self-contained breathing apparatus (EU: 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. 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. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|---|---|
| Exposure limits: | No components with information, unless noted below |
| Chemical Name | Fiberglass, EU/GHS classified |
| EU TWA | 65997-17-3 |
| Netherlands OEL - MAC | 5 mg/m ³ |
| | 10 MGM3 Dust. |
| | 2 MGM3 Respirable dust. |
| | 2 FIBERS/CM3 Respirable fibers. |
| UK EH40 MEL (TWA) | WEL_TWA: 1 mg/m ³ as W; WEL_STEL: 3 mg/m ³ as W |
| Spain - Valores Limite Ambientales - VLE | 1FIBERS/CM3 |
| | 0.5FIBERS/CM3 |
| Switzerland SUVA Limit Values at the Workplace Data - Time Weighted Average (TWA): | Kol_C: k_1C ; Comments: No data |
| Norway Exposure Limit Values Data - Threshold Limit Value: | KONS: 5 mg/m ³ totalstøv |
| Ireland Exposure Limit Values Data - Time Weighted Average (TWA): | TWA 5 mg/m ³ , 1 fibres/cm3 of air |
| Italy - OEL | 0.2 FIBERS/CM3 Fiber. |
| | 1 FIBERS/CM3 Fiber. |
| | 5 MGM3 Inhalable fraction. |

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

| | |
|---|---|
| Engineering Measures toExposure: | 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. 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. (EU: NEN-EN 374). |
| Eye Protection: | Safety glasses with side-shields. (EU: 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. (EU: NEN-EN149). |
| Body Protection: | Long sleeved clothing. (EU: NEN-EN 340-369-465). |
| Hygiene Measures: | When using, do not eat, drink or smoke. |

| | |
|---------------------------|--------------------------|
| Physical State: | Solid |
| Appearance: | Pellets |
| Color: | Same as color code |
| Odor: | None |
| Melting point/range: | Various |
| Autoignition Temperature: | 630°C (1166°F) estimated |
| Vapor Pressure: | Negligible |
| Water Solubility: | Insoluble |
| Evaporation Rate: | Negligible |
| Specific gravity: | >1; (water = 1) |
| VOC content (%): | Negligible |
| Explosive Limits | |
| Explosion Limits | Not determined |
| | Not determined |
| Explosion Limits | Not determined |
| | Not determined |

10. STABILITY AND REACTIVITY

| | |
|--|---|
| Stability: | Stable under ambient conditions. Hazardous polymerization does not occur. |
| Conditions to Avoid: | To avoid thermal decomposition, avoid elevated temperatures. Heating can result in the formation of gaseous decomposition products, some of which may be hazardous. Avoid temperatures above 630°C. |
| Hazardous Decomposition Products: | Traces of, tetrahydrofuran (THF), carbonyl fluoride, hydrogen fluoride, fluorocarbons, phenols, alkylphenols, diarylcarbonates, hydrogen bromide, bromine, brominated hydrocarbons. |
| Incompatible Products: | Strong acids, strong oxidizing agents. |

11. TOXICOLOGICAL INFORMATION

| | |
|-----------------------------|---|
| LD50/oral/rat: | >5000 mg/kg |
| LD50/dermal/rabbit: | >2000 mg/kg |
| Subchronic Toxicity: | No information available |
| 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 |
| Remarks: | The toxicological data has been taken from products of similar composition |
| Special Studies: | <p>PROCESSING FUMES: Processing fumes evolved at recommended processing conditions may contain trace amounts of tetrahydrofuran (typically less than 1 ppm). Extreme processing conditions or temperatures may result in higher levels. See section 8 for appropriate exposure controls and personal protection. In 2-year carcinogenicity bioassays conducted by the National Toxicology Program (NTP), mice and rats (50/sex/group) were exposed to tetrahydrofuran at concentrations of 0, 200, 600, or 1,800 ppm via inhalation 6 hours/day, 5 days/week for 104 weeks. Under the conditions of these 2-year inhalation studies, there was some evidence of carcinogenic activity of tetrahydrofuran in male F344/N rats based on increased incidences of renal tubule adenoma or carcinoma (combined) at 600 and 1,800 ppm. There was no evidence of carcinogenic activity of tetrahydrofuran in female F344/N rats exposed to 200, 600, or 1,800 ppm or male B6C3F1 mice exposed to 200, 600, or 1,800 ppm. There was clear evidence of carcinogenic activity of tetrahydrofuran in female B6C3F1 mice based on increased incidences of hepatocellular neoplasms observed at 1,800 ppm.</p> |

12. ECOLOGICAL INFORMATION

| | |
|---|--|
| Ecotoxicity Effects: | Do not flush into surface water or sanitary sewer system. |
| Ecotoxicity - Invertebrate Data: | Ecological damages are not known or expected under normal use. |
| Germany VCI (WGK): | 0 |

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 transported/delivered using a registered waste carrier for local recycling or waste disposal. |
| EWC waste disposal no: | 702 - waste from the manufacture, formulation, supply and use 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.

DOT

ADR/RID/ADN

IMDG

ICAO

IATA-DGR

15. REGULATORY INFORMATION

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

International Inventories:

| | |
|--------------------------------|---|
| TSCA (USA): | Listed |
| DSL (Canada): | Not listed - One or more components listed on NDSL |
| EINECS/ELINCS (Europe): | Listed |
| ENCS (Japan): | Listed |
| IECSC (China): | Listed |
| KECL (Korea): | Listed |
| PICCS (Philippines): | Not listed |
| AICS (Australia): | Listed |
| NZIoC (New Zealand): | Listed |
| REACH Information: | For this product's REACH related information, please contact webinquiries@sabic-ip.com |

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.

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 | 10-30 | Listed: July 1, 1990 Carcinogenic. (airborne, unbound particles of respirable size) |
| Antimony trioxide Sb ₂ O ₃ 1309-64-4 | 0.01-0.10 | Type of Toxicity: cancer |
| Arsenic 7440-38-2 | <100 ppm | Type of Toxicity: cancer |

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.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

- H332 - Harmful if inhaled
- H302 - Harmful if swallowed
- H411 - Toxic to aquatic life with long lasting effects
- H351 - Suspected of causing cancer in contact with skin

SABIC and brands marked with TM 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:

Europe: Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010. This document is also applicable in other countries and regions.

Prepared by: Product Stewardship & Toxicology

DISCLAIMER: This Safety Data Sheet [SDS] information is provided based on the Hazard Communication Regulations for your region or country and for the use of the persons required to receive this information under those regulations. The information is neither designed nor recommended for any other use or for use by any other person, including for compliance with other laws. SABIC Innovative Plastics does not warrant the suitability for use of this SDS for any other material or product not specifically identified herein. SABIC Innovative Plastics does not warrant the accuracy or authenticity of this SDS unless it has been obtained directly from SABIC Innovative Plastics, or posted or viewed on a SABIC Innovative Plastics website. Modification of this SDS, unless specifically authorized by SABIC Innovative Plastics, is strictly prohibited. This SDS is based on information that is believed to be reliable, but may be subject to change as new information becomes available. Because it is not possible to anticipate all conditions of use, additional safety precautions may be required. Since the use of this material is not under SABIC Innovative Plastics' control, each user is responsible for making its own determination as to the safe and proper handling of this material in its own particular use of this material. SABIC INNOVATIVE PLASTICS MAKES NO REPRESENTATION OR WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each user should read and understand this information and incorporate it into individual site safety programs as required by applicable hazard communication standards and regulations.

End of Safety Data Sheet