# SAFETY DATA SHEET

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

*Print date: 12-May-2015* *Revision Number: 2* *Revision date: 05-May-2015*

## 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

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|---|---|
| **Trademark:** | THERMOCOMP™ |
| **Product Code:** | WX93111 - GY00069 |
| **Product Description:** | Poly (butylene terephthalate) [CASRN 30965-26-5] 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.<br>Plasticslaan 1<br>P.O. Box 117<br>4600 AC Bergen op Zoom<br>The Netherlands |
| **Manufacturer:** | SABIC Innovative Plastics<br>Ottergeerde 22-28<br>4941 VM Raamsdonksveer<br>The Netherlands |
| **Emergency Telephone Number (United States):** | Bergen op Zoom +31(0)164-292911 (24/24) |
| **Emergency Transportation/CHEMTREC (24 HOUR):** | 800 424-9300 (USA)<br>+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**

**Not hazardous** Not classified

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

Route of exposure, mechanistic information and metabolism studies are pertinent to determining the relevance of an effect in humans(GHS section 1.3.2.4.9.4). Where appropriate, GHS classification can be specified as route-dependent. The size distribution of the pellets containing the Antimony Trioxide eliminates the carcinogenicity hazard potential from Antimony Trioxide. This is the case because carcinogenicity of Antimony Trioxide has only been observed in animal studies under conditions that can lead to pulmonary overload.

## CLP/GHS-Labeling

GHS Labeling not required

**Precautionary Statements**

No GHS specific Precautionary Statements required - observe all other warnings and handling instructions in this SDS.

## 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.

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| **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) |
| Antimony trioxide Sb2O3 | 1309-64-4 | 1-5 | Carc. Cat.3;R40 | Acute Tox. 5 (H303) Carc. 2 (H351) |
| Titanium dioxide | 13463-67-7 | 0.3-1.0 | R23-33-36/37/38/25-29 | |

**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

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| **Autoignition Temperature:** | 360°C (680°F) estimated |
| **Explosive Limits upper:** | Not determined |
| **lower:** | Not determined |
| **Suitable Extinguishing Media:** | Water spray mist or foam Use dry chemical, CO2, 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:** | Carbon dioxide and dry chemical are not recommended because their lack of cooling capacity may permit re-ignition 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 bromide See section 10 |
| **Hazards from Combustion Products:** | 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

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| **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

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| **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

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| **Exposure limits:** | No components with information, unless noted below |
| **Chemical Name** | **Fiberglass, EU/GHS classified** |
| | **65997-17-3** |
| **EU TWA** | 5 mg/m³ |
| **Netherlands OEL - MAC** | 10 MGM3 Dust.<br>2 MGM3 Respirable dust.<br>2 FIBERS/CM3 Respirable fibers. |
| **UK EH40 MEL (TWA)** | WEL_TWA: 1 mg/m³ as W; WEL_STEL: 3 mg/m³ as W |
| **Spain - Valores Limite Ambientales - VLE** | 1FIBERS/CM3<br><br>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/m³ totalstøv |
| **Ireland Exposure Limit Values Data - Time Weighted Average (TWA):** | TWA 5 mg/m³ , 1 fibres/cm3 of air |
| **Italy - OEL** | 0.2 FIBERS/CM3 Fiber.<br>1 FIBERS/CM3 Fiber.<br>5 MGM3 Inhalable fraction. |
| **Chemical Name** | **Antimony trioxide Sb2O3** |
| | **1309-64-4** |
| **SABIC Recommend (8 Hr)*** | 0.5 mg/m³ TWA as antimony compounds |
| **France INRS (VME)** | 0.5 MGM3 Sb |
| **Netherlands OEL - MAC** | 0.5 MGM3 Sb |
| **UK EH40 MEL (TWA)** | WEL_TWA: 0.5 mg/m³ as Sb |
| **Spain - Valores Limite Ambientales - VLE** | 0.5MGM3 |
| **Denmark TWA Data - Threshold Limit Values (TLV):** | GR: 0.5 mg/m³ beregnet som Sb |
| **Switzerland SUVA Limit Values at the Workplace Data - Time Weighted Average (TWA):** | 0.1 MGM3 Inhalable dust. Sb |
| **Sweden Threshold Limit Values Data -** | 0.5 MGM3 Total dust. Sb |
| **Norway Exposure Limit Values Data - Threshold Limit Value:** | KONS: 0.5 mg/m³ som Sb; Anm: K |
| **Ireland Exposure Limit Values Data - Time Weighted Average (TWA):** | TWA 0.5 mg/m³ as Sb |
| **Greece - OEL** | 0.5 MGM3 Sb |
| **Finland Exposure Limit Values Data - Time Weighted Average (TWA):** | HTP_8: 0.5 mg/m³ ; HTP_15: 40 mg/m³ ; HOU: Sb |
| **Italy - OEL** | 0.5 MGM3 Sb |
| **Chemical Name** | **Titanium dioxide** |
| | **13463-67-7** |
| **France INRS (VME)** | 10 MGM3 Ti |
| **Netherlands OEL - MAC** | 10 MGM3 |
| **UK EH40 MEL (TWA)** | WEL_TWA: 4 mg/m³ respirable, 10 mg/m³ total inhalable |
| **Spain - Valores Limite Ambientales - VLE** | VLA-ED: 10 mg/m³ |
| **Denmark TWA Data - Threshold Limit Values (TLV):** | GR: 6 mg/m³ beregnet som Ti |
| **Switzerland SUVA Limit Values at the Workplace Data - Time Weighted Average (TWA):** | MAK_Wert: 3 mg/m³ alveolengangiger ; Kol_SS: Grp_C |
| **Sweden Threshold Limit Values Data -** | NGV: 5 MGM3 totaldamm |
| **Portugal - TWAs** | VLE-MP: 10 mg/m³ ; NOT: A_4; FUND: Pulmão |
| **Norway Exposure Limit Values Data - Threshold Limit Value:** | KONS: 5 mg/m³ |
| **Ireland Exposure Limit Values Data - Time Weighted Average (TWA):** | TWA 4 mg/m³ respirable dust, 10 mg/m³ total inhalable dust |
| **Greece - OEL** | DT_1 5 mg/m³ T_1 , 10 mg/m³ T_3 |
| **Italy - OEL** | 10 MGM3 |

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| **Poland - OEL:TWAs** | 10 mg/m³ NDS |

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

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| **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 for diagnostics. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Handle in accordance with good industrial hygiene and safety practice. Provide for appropriate exhaust ventilation at machinery. Polybutyleneterephthalate fumes and condensates may contain trace quantities of tetrahydrofuran (typically less than 1 ppm, see section 2, 3 and 11). |
| **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. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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| **Physical State:** | Solid |
| **Appearance:** | Pellets |
| **Color:** | Varies Same as color code |
| **Odor:** | None |
| **Melting point/range:** | Various |
| **Autoignition Temperature:** | 360°C (680°F) estimated |
| **Vapor Pressure:** | Negligible |
| **Water Solubility:** | Insoluble |
| **Evaporation Rate:** | Negligible |
| **Specific gravity:** | >1; (water = 1) |
| **VOC content (%):** | Negligible |
| **Explosive Limits** | |
| **upper:** | Not determined |
| **lower:** | Not determined |

## 10. STABILITY AND REACTIVITY

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| **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 320°C. Avoid temperatures above 360 °C. 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. |
| **Hazardous Decomposition Products:** | Traces of, phenols, alkylphenols, diarylcarbonates, hydrogen bromide, carbon oxides, aliphatic aldehydes, bromine, brominated hydrocarbons. |

## 11. TOXICOLOGICAL INFORMATION

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| **LD50/oral/rat:** | >5000 mg/kg |
| **LD50/dermal/rabbit:** | >2000 mg/kg |
| **Subchronic Toxicity:** | No information available |
| **Primary Irritation:** | Skin irritation Substance does not generally irritate and is only mildly irritating to the skin |
| **IARC:** | Not listed |
| **OSHA:** | Not regulated |
| **NTP:** | Not tested |
| **Remarks:** | The toxicological data has been taken from products of similar composition |
| **Special Studies:** | 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. Antimony trioxide: Tested in a chronic inhalation of 45 mg/m$^3$ by guinea pigs resulted in extensive pneumonitis and fatty degeneration of the liver. Other long-term inhalation studies in rats and rabbits found lipid pneumonitis. One epidemiology study of process workers exposed to antimony metal suggests an increase in lung cancer. Animal studies and epidemiological studies suggests developmental toxicity. Titanium Dioxide: The International Agency for Research on Cancer (IARC) has determined titanium dioxide to be a possible human carcinogen (class 2B) based on evidence in experimental animals. Rats exposed to high doses of titanium dioxide by inhalation or intratracheal instillation showed an increased incidence of lung tumors. |

## 12. ECOLOGICAL INFORMATION

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| **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

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| **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

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| **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:**

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| **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 |
| **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 Sb2O3 1309-64-4 | 1-5 | Type of Toxicity: cancer |
| Titanium dioxide 13463-67-7 | 0.3-1.0 | Listed: September 2, 2011 Carcinogenic. (airborne, unbound particles of respirable size) |
| Carbon black 1333-86-4 | 0.01-0.10 | 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.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3**
H303 - May be harmful if swallowed
H351 - Suspected of causing cancer in contact with skin

**Risk Phrases:**
R40 - Limited evidence of a carcinogenic effect



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

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**End of Safety Data Sheet**