

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

Print date: 03-Jun-2015 Revision Number: 2 Revision date: 04-Jun-2015

# 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Trademark: STAT-KON™

Product Code: ZEL34XXC - BK1B519

Product Description: Poly (styrene-butadiene) [CASRN 9003-55-8]/Polystyrene [CASRN 9003-53-6] blend

**Product Type:** Commercial Product

Restrictions on Use: Contains Industry recycled material

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

Ottergeerde 22-28

4941 VM Raamsdonksveer

The Netherlands

Emergency Telephone Number: Bergen op Zoom +31(0)164-292911 (24/24)

**Emergency** 800 424-9300 (USA)

Transportation/CHEMTREC +

(24 HOUR):

+1 703-527-3887 (globally, outside USA)

**E-mail:** webinquiries@sabic-ip.com

Website Address: www.sabic-ip.com

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 1 of 10 Revision date: 04-Jun-2015



## 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 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

In 1995, the International Agency for Research on Cancer (IARC) concluded that there is "sufficient evidence in experimental animals for the carcinogenicity of carbon black." IARC's overall evaluation was that "Carbon black is possibly carcinogenic to humans (2B)." In 2006, IARC re-affirmed this classification. There has been no causal link between carbon black exposure and cancer risk in humans. Applying the rules of the Globally Harmonized System of Classification and Labelling (GHS, e.g. UN 'Purple Book', EU CLP Regulation) the results of repeated dose toxicity and carcinogenicity studies in animals do not lead to classification of Carbon Black for Specific Target Organ Toxicity (Repeated exposure) and carcinogenicity. UN GHS says, that even if adverse effects are seen in animal studies or in-vitro tests, no classification is needed if the mechanism or mode of action is not relevant to humans. The European CLP Regulation also mentions, that no classification is indicated if the mechanism is not relevant to humans. Furthermore, the CLP guidance on classification and labelling states, that "lung overload" in animals is listed under mechanism not relevant to humans.

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 presence of the White Mineral Oil does not lead to the thermoplastic pellets having a viscosity in the range of concern for aspiration hazard.

#### 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.

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 2 of 10 Revision date: 04-Jun-2015



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]:
Carbon black	1333-86-4	0.3-1.0		
PARAFFINIC BASEOIL	74869-22-0	0.3-1.0	Carc. Cat.2;R45	Carc. 1B (H350)
Tri(nonylphenyl) phosphite	26523-78-4	0.3-1.0	Xi;R50/53	Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

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

Processing fumes inhalation may be irritating to the respiratory tract. If symptoms are experienced remove victim from source of contamination or move victim to fresh air and

obtain medical advice 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: Cool molten product on skin with plenty of water. Do not remove solidified product Do not

peel polymer from the skin

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 3 of 10 Revision date: 04-Jun-2015



## 5. FIRE-FIGHTING MEASURES

**Autoignition Temperature:** 

490 °C (914°F) estimated

**Explosive Limits** 

upper:

Not determined

lower:

Not determined

Suitable Extinguishing Media: 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.)

for Safety Reasons:

Unsuitable Extinguishing Media 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.

**Hazards from Combustion** 

Products:

Fire will produce dense black smoke containing hazardous combustion products, carbon

oxides, hydrocarbon fragments,

**Special Protective Equipment** 

for Firefighters:

In the event of fire, wear self-contained breathing apparatus

Thermal decomposition can lead to release of irritating gases and vapors **Specific Hazards:** 

## 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: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat

sources and sources of ignition.

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 4 of 10 Revision date: 04-Jun-2015



## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure limits:** No components with information, unless noted below

**Chemical Name** Carbon black 1333-86-4 France INRS (VME) 3.5 MGM3

**Netherlands OEL - MAC** 3.5 mg/m<sup>3</sup> **UK EH40 MEL (TWA)** 

WEL\_TWA: 3.5 mg/m<sup>3</sup>; WEL\_STEL: 7 mg/m<sup>3</sup> Spain - Valores Limite Ambientales - VLE VLA-ED: 3.5 mg/m3

Denmark TWA Data - Threshold Limit Values (TLV): ANM: p\_K; GR: 3.5 mg/m<sup>3</sup> Sweden Threshold Limit Values Data -NGV: 3 MGM3 totaldamm

Portugal - TWAs VLE-MP: 3.5 mg/m<sup>3</sup>; NOT: A\_4; FUND: Pulmão

Norway Exposure Limit Values Data - Threshold Limit KONS: 3.5 mg/m<sup>3</sup>

Value:

Ireland Exposure Limit Values Data - Time Weighted

Average (TWA): Greece - OEL

Finland Exposure Limit Values Data - Time Weighted

Average (TWA):

Italy - OEL 3.5 mg/m<sup>3</sup>

\*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

TWA 3.5 mg/m<sup>3</sup>; STEL 7 mg/m<sup>3</sup>

DT\_1 3.5 mg/m<sup>3</sup>; DT\_2 7 mg/m<sup>3</sup>

HTP\_8: 3.5 mg/m<sup>3</sup>; HTP\_15: 7 mg/m<sup>3</sup>

machinery.

**Hand Protection:** Protective gloves should be worn.

**Eye Protection:** Safety glasses with side-shields.

In the case of hazardous fumes, wear self contained breathing apparatus. In case of **Respiratory Protection:** 

insufficient ventilation wear suitable respiratory equipment.

**Body Protection:** Long sleeved clothing.

**Hygiene Measures:** When using, do not eat, drink or smoke.

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 5 of 10 Revision date: 04-Jun-2015



## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Appearance: Pellets

Color: Same as color code

Odor: Slight

Melting point/range: This product does not exhibit a sharp melting point but softens

gradually over a wide range of temperatures.

**Autoignition Temperature:** 490 °C (914°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

upper: Not determined Explosion Limits 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 490 °C without adequate ventilation. To avoid thermal

decomposition, avoid elevated temperatures. Heating can result in the formation of gaseous

decomposition products, some of which may be hazardous.

**Hazardous Decomposition** 

Products:

Traces of, styrene, toluene, styrene dimers, aliphatic amines, aldehydes and alcohols, ethylbenzene and 4-vinylcyclohexene, carbonyl fluoride, hydrogen fluoride, fluorocarbons,

phenols, alkylphenols, diarylcarbonates, perfluorohydrocarbon fragments.

**Incompatible Products:** Strong acids, strong oxidizing agents.

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 6 of 10 Revision date: 04-Jun-2015



## 11. TOXICOLOGICAL INFORMATION

**LD50/oral/rat:** >5000 mg/kg

LD50/dermal/rabbit: >2000 mg/kg

Subchronic Toxicity: No information available

**Sensitization:** Contains TNPP (trisnonylphenyl phosphite), which may produce an allergic reaction.

**Primary 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:** Polyphenylene ether: In two independent 2 year dietary studies, purebred beagles and

laboratory rats were fed polyphenylene ether resin powder (up to 10% by weight in the animal diet). In both studies, there were no adverse effects on physical appearance, behavior, growth, food consumption, survival, clinical laboratory results, organ weights or gross or microscopic pathology. In a 6 month chronic inhalation study, rats and guinea pigs

exposed 6 hrs/day to up to 300 mg/m³ PPE dust developed no physical, nutritional, hematologic, clinical or pathological reaction except to lung tissue changes which consisted of macrophage accumulation, many of which were degenerative in the pulmonary alveoli. Polyphenylene ether is not a mutagen by Ames (Salmonella) Assay with and without activation. 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. Carbon Black:

The scientific discussions about the carcinogenic potential of inorganic low solubility

particles (fine dust) including carbon black has not been concluded. Many inhalation toxicologists believe the lung fibrosis and tumors that developed in rats following exposure to carbon black result form massive accumulation of small dust particles that overwhelm the clearance mechanism and produce what is termed "lung overload," an effect considered to be rat specific and not relevant to humans. In addition, based on epidemiological studies, no causal link between carbon black exposure and cancer risk in humans has been demonstrated. Thermal degradation of the fluoropolymer additives in this product may result in the release of pyrolysis products and fumes. Short term inhalation exposure may cause influenza-like symptoms such as chest pain/tightness, shortness of breath, sore throat, fever and chills, malaise and sometimes headache (also known as "polymer fume fever"). Following removal from exposure, complete resolution is expected within 12-48 hours. Prolonged and repeated exposure to high levels may lead to effects such as

pulmonary edema and lung disease.

#### 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.

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 7 of 10 Revision date: 04-Jun-2015



# 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.

<u>DOT</u>

ADR/RID/ADN

IMDG

**ICAO** 

IATA-DGR

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 8 of 10 Revision date: 04-Jun-2015



## 15. REGULATORY INFORMATION

This product should follow related Japanese local chemical regulations and transportation requirement.

#### International Inventories:

TSCA (USA): Not listed DSL (Canada): Listed **EINECS/ELINCS (Europe):** Listed ENCS (Japan): Listed IECSC (China): Listed KECL (Korea): Not listed PICCS (Philippines): Listed AICS (Australia): Not 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:		
ı	Carbon black	0.3-1.0	Listed: February 21, 2003	Carcinogenic. (airborne, unbound particles of respirable	
	1333-86-4		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

H317 - May cause an allergic skin reaction

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H350 - May cause cancer if swallowed

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

www.sabic-ip.com

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

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 9 of 10 Revision date: 04-Jun-2015



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** 

Product Name: STATK-ZCL-4034 HP BK8-045-5 Page 10 of 10 Revision date: 04-Jun-2015