

# SAFETY DATA SHEET Asia Pacific GHS Format

Print date: 16-Dec-2012 Revision Number: 3 Revision date: 16-Dec-2012

# 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Trademark: COLORCOMP\*

Product Code: EX12304C-BK1D414

**Product Description:** Polyetherimide [CASRN 61128-46-9]

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 Japan LLC.

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#### 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.

# Globally Harmonized System, UN(GHS) - Classification

#### **GHS Category**

#### Not hazardous

Not classified

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.

### **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:

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#### **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: OSHA, IARC and/or NTP have listed carbon, titanium dioxide, crystalline silica (quartz),

respirable glass and certain heavy metals, present in some colorants and fillers, as carcinogens. If these materials are present in this product at significant quantities, they are shown in Section 2/3. These materials are essentially bound to the plastic matrix and are unlikely to contribute to workplace exposure under recommended processing conditions.

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 % | EC-No.    |
|---------------|------------|----------|-----------|
| Carbon black  | 1333-86-4  | 0.1-1.0  | 215 60 99 |

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: Immediately cool the skin by rinsing with cold water after contact with hot material. Wash off

immediately with soap and plenty of water. 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:** 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

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# 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use dry chemical, CO2, water spray or "alcohol" foam.

Unsuitable Extinguishing Media for Safety Reasons:

Do not use a solid water stream as it may scatter and spread fire.

**Hazards from Combustion** 

**Products:** 

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

oxides, hydrocarbon fragments, nitrogen oxides.

**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.

**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.

**Exposure hazards:** Do not release chemically contaminated water into drains, soil or surface water. Sufficient

measures must be taken to retain the water used for extinguishing. Dispose of contaminated

water and soil according to local regulations.

#### 6. ACCIDENTAL RELEASE MEASURES

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.

Clean up: Sweep up and shovel into suitable containers for disposal. Do not create a powder cloud by

using a brush or compressed air.

# 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

**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. Keep containers dry and tightly closed to avoid moisture absorption and

contamination. Keep away from food and drink.

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

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

| Chemical Name | US OSHA PEL<br>(8 Hr)            | Japan OEL(TWA)                   | China OEL(TWA) | Korea OEL(TWA)             | Singapore OEL(TWA)            | Thailand<br>OEL(TWA) |
|---------------|----------------------------------|----------------------------------|----------------|----------------------------|-------------------------------|----------------------|
| Carbon black  | FRL_TWA: 3.5 mg/m <sup>3</sup> ; | OEL_M: 4 mg/m <sup>3</sup> Total | 1              | TWA: 3.5 mg/m <sup>3</sup> | PEL_LT: 3.5 mg/m <sup>3</sup> | No Information       |
| 1333-86-4     | TL_PEL: 3.5 mg/m <sup>3</sup>    | dust, 1 mg/m <sup>3</sup>        |                |                            |                               |                      |
|               |                                  | Respirable dust                  |                |                            |                               |                      |

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| Chemical Name             | India TWA      | Malaysia OEL(TWA)               | Taiwan OEL(TWA)           | Australian OEL(TWA) | Phillipines OEL(TWA) | SABIC<br>Recom.(8 Hr)* |
|---------------------------|----------------|---------------------------------|---------------------------|---------------------|----------------------|------------------------|
| Carbon black<br>1333-86-4 | No Information | PEL_TWA8: 3.5 mg/m <sup>3</sup> | PC: 3.5 mg/m <sup>3</sup> | No Information      | 3.5 mg/m³            | No Information         |

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

**Engineering Measures to** 

Reduce Exposure:

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.

**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. If dust or powder are produced from secondary operations such as sawing or grinding, 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: Pellets

Color: Same as color code
Odor: None or slight

Melting point/range: This product does not exhibit a sharp melting point but softens gradually over a wide range of

temperatures.

Flash Point: Not applicable Evaporation Rate: Negligible

**Explosive Limits** 

upper: Not determined lower: Not determined ressure: Negligible

Vapor Pressure:NegligibleSpecific gravity:>1; (water = 1)Water Solubility:Insoluble

Autoignition Temperature: No information available

**Explosive Properties:** Dust may form explosive mixture in air

Oxidising Properties: Not oxidising VOC content (%): Negligible

# 10. STABILITY AND REACTIVITY

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10. STABILITY AND REACTIVITY

**Reactivity:** Not reactive under recommended conditions of handling, storage, processing and use.

Stability: Stable under ambient conditions. Hazardous polymerization does not occur.

**Polymerization:** 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. 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.

May react with strong oxidizing agents, strong acids or other highly reactive chemicals.

**Hazardous Decomposition** 

**Products:** 

Process vapors under recommended processing conditions may include trace levels of hydrocarbons, phenols, alkylphenols, diarylcarbonates, other substituted hydrocarbons,

hydrogen cyanide (hydrocyanic acid).

## 11. TOXICOLOGICAL INFORMATION

#### **Acute Toxicity**

**Product Information:** 

**LD50/oral/rat:** >5000 mg/kg **LD50/dermal/rabbit:** >2000 mg/kg

**Component Information:** 

Component Information Text: No data available

Sensitization

Respiratory Sensitization: Not classified

Irritation:

Eye Irritation: no data available

Subchronic Toxicity (28 days)

Repeated Oral Toxicity(28d):
Repeated Dermal Toxicity(28d): No Information available
Subchronic Toxicity:
No information available
No information available

**Chronic Toxicity** 

Carcinogenicity: There are no known carcinogenic chemicals in this product except specifically mentioned

below.

| Chemical Name | IARC: |
|---------------|-------|
| Carbon black  | 2B    |
| 1333-86-4     |       |

Mutagenic Effects: No data is available on the product itself

Reproductive Toxicity:

No information available
No information available

Neurological effects: No information available

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Specific Target Organ Toxicity(STOT)

Target Organ Effects: Not established

Aspiration Hazard

Aspiration Hazard Statement: No data available

Other relevant toxicity information

IARC: Not listed
OSHA: Not regulated
NTP: Not tested

**Remarks:** The toxicological data has been taken from products of similar composition.

Special Studies: 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.

### 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

# **Component Information:**

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

| Chemical Name | Toxicity to Fish  | Toxicity to Algae | Daphnia Magna (Water Flea) | Toxicity to Microorganisms |
|---------------|-------------------|-------------------|----------------------------|----------------------------|
| Carbon black  | No data available | No data available | No data available          | No data available          |
| 1333-86-4     |                   |                   |                            |                            |

**Product Information:** 

Persistence and Degradability

Biodegradation: Not inherently biodegradable

Partition coefficient (n-octanol/water)

Not established

**Bioaccumulative Potential:** 

Bioaccumulation: Not established

Mobility

Mobility: May be separated mechanically in waste water plants.

Other Adverse Effects

**Ecotoxicity Effects:** Do not flush into surface water or sanitary sewer system.

# 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused** Where possible recycling is preferred to disposal or incineration. Dispose of in accordance with products:

Unused with products:

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Contaminated Packaging: Empty containers should be transported/delivered using a registered waste carrier for local

recycling 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

IMO / IMDG Not regulated

ICAO Not regulated

IATA-DGR Not regulated

**DOT** Not regulated

ADR/RID Not regulated

ADR Not regulated

ADN Not regulated

### 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.

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

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which 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

Chronic Health Hazard

Fire Hazard

Sudden Release of Pressure Hazard

N

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**Reactive Hazard** 

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#### Canada:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

#### WHMIS hazard class:

Non-controlled

#### California Proposition 65:

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

| somponente in the product known to the state of samonia to sauce sandor and of reproductive encode, are noted below. |          |                            |   |  |
|--|----------|----------------------------|---|--|
| Chemical Name  | Weight % | California Proposition 65: |   |  |
| Carbon black   | 30-70    | Listed: February 21, 2003  | Carcinogenic. (airborne, unbound particles of |  |
| 1333-86-4  |          | respirable size)           |   |  |

#### RoHS EU Directive 2002/95/EC:

The subject product is in compliance with EU RoHS Directive 2002/95/EC. 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.

#### Remarks:

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.

HMIS Rating Health: 0 Flammability: 1 Reactivity: 0

# **16. OTHER INFORMATION**

COLORCOMP\* is a trademark of SABIC Innovative Plastics IP BV

#### **MSDS Scope:**

China: Conforms to Chinese Regulation on the Control over Safety of Hazardous Chemicals (Decree No 591) and GHS standards GB15258,GB13698,GB/T16483 etc.

Japan: Conforms to Industrial Safety and Health Law, Japan (2006) and Industrial GHS Standards JIS Z7250, JIS Z7251

Korea: Conforms to Industrial Safety & Health Act, Ministry of Labor, Korea

Singapore: Conforms to Singapore workplace Safety and Health (WSH) Act, WSH Regulations, and GHS Standard 586

Taiwan: Conforms to Taiwan Rules on Hazard Communication and Labeling of Hazardous Substances, (Council of Labor Affairs,

Taiwan) and GHS standards Z1051

This document is also applicable in other countries and regions.

Prepared by: Product Stewardship & Toxicology

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**End of Safety Data Sheet** 

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