

SAFETY DATA SHEET

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

Print date: 14-Jun-2016 Revision Number: 3 Revision date: 14-Jun-2016

1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Trademark: LUBRICOMP™

Product Code: UX05051 - BK1E580

Product Description: Polyphthalamide (PPA) [CASRN proprietary] glass fiber filled

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.

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(24 HOUR):

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Product Name: UFL4026AFRHSHW-BK83425 Page 1 of 11 Revision date: 14-Jun-2016



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 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

Product Name: UFL4026AFRHSHW-BK83425 Page 2 of 11 Revision date: 14-Jun-2016



- · 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.
- Powder can cause mechanical irritation if dusts are generated.
- Take precautionary measures against static discharges. During processing, dust may form explosive mixture in air.

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.

S: Processing vapors may cause irritation to the eyes, skin, and respiratory tract. In cases of

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	30-70	Classification: Carc.Cat.3;R40	Carc.2 (H351)
Antimony trioxide Sb2O3	1309-64-4	5-10	Carc. Cat.3;R40	Acute Tox. 5 (H303) Carc. 2 (H351)
Copper (I) iodide	7681-65-4	0.1 - <0.3	N;R50-53 Xn;R61R37R41	
Carbon black	1333-86-4	0.1 - <0.3		

For the full text of the H-statements, 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.

Product Name: UFL4026AFRHSHW-BK83425 Page 3 of 11 Revision date: 14-Jun-2016



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: 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

Flash Point: The product is not flammable

Decomposition temp. (°C): 420 °C

Autoignition Temperature: 400°C (752°F) estimated

Explosive Limits

upper: Not determined lower: Not determined

Explosive Properties: Material is not sensitive to mechanical impact, but is sensitive to static discharge under dust

cloud conditions

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.)

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire for Safety Reasons:

Hazardous Decomposition Products:

See section 10, hydrogen fluoride, carbonyl fluoride, fluorocarbons, Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbons

fragments, hydrogen bromide.

Hazards from Combustion

Products:

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

oxides, hydrocarbon fragments, brominated hydrocarbons.

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:

In the event of fire, wear self-contained breathing apparatus (EU: NEN-EN137)

Product Name: UFL4026AFRHSHW-BK83425 Page 4 of 11 Revision date: 14-Jun-2016



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.

Product Name: UFL4026AFRHSHW-BK83425 Page 5 of 11 Revision date: 14-Jun-2016



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

No components with information, unless noted below

Chemical Name	Brazil NR15	Argentina Annex III	ACGIH	US OSHA PEL (8 Hr)	SABIC Recommend (8 Hr)*
Fiberglass, EU/GHS classified 65997-17-3	No Information	No Information	Inhalable fraction - TWA: 5 mg/m³; 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	No Information	No Information
Antimony trioxide Sb2O3 1309-64-4	No Information	No Information	0.5 MGM3 Sb	0.5 MGM3	0.5 mg/m³ TWA as antimony compounds
Copper (I) iodide 7681-65-4	No Information	No Information	Inhalable fraction and vapor - TWA: 0.1 ppm; Notations: Not Classifiable as a Human Carcinogen; Crit Eff: Hypothyroidism, Upper respiratory tract irritation	No Information	No Information
Carbon black 1333-86-4	3.5 mg/m ³	No Information	TWA: 3.5 mg/m³; Notations: Not Classifiable as a Human Carcinogen	FRL_TWA: 3.5 mg/m³ ; TL_PEL: 3.5 mg/m³	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 practices. 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.

Product Name: UFL4026AFRHSHW-BK83425 Page 6 of 11 Revision date: 14-Jun-2016



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Pellets Appearance:

Same as color code Color:

None Odor:

Melting point/range: Various

Autoignition Temperature: 400°C (752°F) estimated

Vapor Pressure: Negligible

Water Solubility: Insoluble **Evaporation Rate:** Negligible

Decomposition temp. (°C): 420 °C

Specific gravity: >1; (water = 1)

Explosive Limits

Not determined upper:

lower: Not determined

VOC content (%): Negligible

10. STABILITY AND REACTIVITY

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

Conditions to Avoid: Avoid temperatures above 320°C. To avoid thermal decomposition, avoid elevated

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

some of which may be hazardous.

Materials to avoid: strong acids and oxidizing agents.

Hazardous Decomposition

Traces of, carbon oxides, nitrogen oxides (NOx), hydrogen cyanide (hydrocyanic acid), **Products:** carbonyl fluoride, hydrogen fluoride, fluorocarbons, phenols, alkylphenols, diarylcarbonates,

hydrogen bromide, perfluorohydrocarbon fragments, bromine, brominated hydrocarbons.



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

Not regulated OSHA:

Not tested NTP:

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

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. 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. Antimony trioxide: Tested in a chronic inhalation of 45 mg/m³ 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. 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.

Other information: Ecological damages are not known or expected under normal use.

Ecotoxicity - Invertebrate Data: Ecological damages are not known or expected under normal use.

Product Name: UFL4026AFRHSHW-BK83425 Page 8 of 11 Revision date: 14-Jun-2016



13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Where possible recycling is preferred to disposal or incineration.

Descartar em conformidade con as legislação locals.

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

<u>IMDG</u>

ICAO

IATA-DGR

ANTT 420

Product Name: UFL4026AFRHSHW-BK83425 Page 9 of 11 Revision date: 14-Jun-2016



15. REGULATORY INFORMATION

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

International Inventories:

TSCA (USA): Not listed

DSL (Canada): Not listed - One or more components listed on NDSL

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.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	30-70	Listed: July 1, 1990 Carcinogenic. (airborne, unbound particles of respirable size)
Antimony trioxide Sb2O3 1309-64-4	5-10	Type of Toxicity: cancer
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: 1
Reactivity: 0

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

Product Name: UFL4026AFRHSHW-BK83425 Page 10 of 11 Revision date: 14-Jun-2016



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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

Product Name: UFL4026AFRHSHW-BK83425 Page 11 of 11 Revision date: 14-Jun-2016