Safety data sheet
GB/T 16483-2008 and GB/T 17519-2013

Printing date: 4.11.2025 *Version number: 1* *Revision date: 4.11.2025*

SECTION 1: Identification of the substance/mixture and of the company/undertaking

·**Product identifier**

·**Trade name:** **ABS-FR *filament***

·**Details of the supplier of the safety data sheet**
·**Manufacturer / Supplier:** SHENZHEN ESUN INDUSTRIAL CO.,LTD.
·**Full address:**
15A, MICROSOFT KETONG BUILDING, NO. 55 GAOXINNAN 9TH ROAD, HIGH TECH COMMUNITY, YUEHAI STREET, NANSHAN DISTRICT, SHENZHEN.
·**Phone number:** 0755 86393186
·**Email:** bright@esungroup.net

·**Further information obtainable from:** SHENZHEN ESUN INDUSTRIAL CO.,LTD.

·**Emergency telephone number:**
Emergency consultation hotline for national chemical accidents
Tel: +86 532 83889090

·**Product recommendations and restricted uses:** 3D printing

·**Reference Number:**

·**Remark:**
This product is likely to be classified as article with substances not intended to be released and is out of scope of a SDS as set out in Regulation GB/T17519-2013. This SDS is generated for applicant's reference only.

SECTION 2: Hazards identification

·**Emergency Overvies**
According to product specification, Solid, No available.
·**Classification of the substance or mixture**
·**Classification according to GHS**
The product is not classified according to the GHS.

·**Information concerning particular hazards for human and environment:**
The product has not to be labelled due to the calculation procedure of GHS.

·**Classification system:**
The classification is according to the latest edition of GHS, and extended by company and literature data.

·**Label elements**
·**Labelling according to GHS:** This product is classified and labeled according to GHS.
·**Hazard pictograms** Not applicable
·**Signal word** Not applicable

·**Hazard-determining components of labelling:** Not applicable
·**Hazard statements** Not applicable
·**Precautionary statements** Not applicable
·**Physical and chemical hazards:** No further relevant information available.
·**Health hazards:** No further relevant information available.
·**Environmental hazards:** No further relevant information available.

·**Other hazards:**
·**Results of PBT and vPvB assessment**
·**PBT:** Not applicable
·**vPvB:** Not applicable

SECTION 3: Composition/information on ingredients

·**Mixtures**
·**Description:**
Mixture of the substances listed below with nonhazardous additions.
For the wording of the listed hazard statements refer to section 16.

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Trade name: ABS-FR filament

·***Composition:***

CAS: 9003-56-9	ABS Resins	81~87%
CAS: 84852-53-9	Decabromodiphenyl Ethane	10~13%
CAS: 1309-64-4	Diantimony trioxide	3~6%

SECTION 4: First aid measures

·***Description of first aid measures***
·***General description:*** *No special measures required.*
·***After inhalation:*** *Supply fresh air; consult doctor in case of complaints.*
·***After skin contact:*** *Generally the product does not irritate the skin.*
·***After eye contact:*** *Rinse opened eye for several minutes under running water.*
·***After swallowing:*** *If symptoms persist consult doctor.*

·***Most important symptoms and effects, both acute and delayed:***
No further relevant information available.

·***Indication of any immediate medical attention and special treatment needed:***
No further relevant information available.

SECTION 5: Firefighting measures

·***Extinguishing media***
·***Suitable extinguishing agents:*** *Use fire extinguishing methods suitable to surrounding conditions.*

·***Special hazards arising from the substance or mixture:*** *No further relevant information available.*

·***Advice for firefighters***
·***Protective equipment:*** *No special measures required.*

SECTION 6: Accidental release measures

·***Personal precautions, protective equipment and emergency procedures:*** *Not required.*

·***Environmental precautions:*** *Do not allow to enter sewers/ surface or ground water.*

·***Methods and material for containment and cleaning up:***
Pick up mechanically.
Preventive measures to prevent secondary hazards: *Prevent leaks from entering sewers and basements.*

·***Reference to other sections:***
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

·***Precautions for safe handling:***
No special measures required.
For the general occupational hygienic measures refer to Section 8.
·***Information about fire - and explosion protection:*** *No special measures required.*

·***Storage***
·***Requirements to be met by storerooms and receptacles:*** *No special requirements.*
·***Information about storage in one common storage facility:*** *Not required.*

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·**Further information about storage conditions:** None.

SECTION 8: Exposure controls/personal protection

·**Control parameters**

·**Ingredients with limit values that require monitoring at the workplace:**	
CAS:	
PEL(US)	PC-TWA:15*5**mg/m³ * total dust **respirable fraction
REL (US)	PC-TWA:10*5**mg/m³ * total dust **respirable fraction
TLV (US)	TLV withdrawn

·**Regulatory information**
PEL (US): Guide to Occupational Exposure Values (OSHA PELs)
OEL (CN): GBZ2.1-2007 Occupational exposure limits for harmful factors in the workplace
REL (US) Guide to Occupational Exposure Values (NIOSH RELs)
TLV (US): Guide to Occupational Exposure Values (TLV)

·**Additional information:** The lists valid during the making were used as basis.

·**Exposure controls**
Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure.
·**Appropriate engineering controls:** See Section 7 for information about design of technical facilities.

·**Individual protection measures, such as personal protective equipment**
·**Respiratory protection:** Not required.
·**Hand protection:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
·**Material of gloves:**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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·**Penetration time of glove material:**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
·**Eye protection:** Not required.
·**Skin and body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

·**Information on basic physical and chemical properties**	
·**Physical state:**	Solid
·**Colour:**	According to product specification
·**Odour:**	Not available
·**Odour threshold:**	Not available
·**pH:**	Not available
·**Melting point/Freezing point:**	180~200 °C
·**Boiling point:**	Not available
·**Flash point:**	Not available
·**Flammability (Solid, gas):**	Not available
·**Auto-ignition temperature:**	Not available
·**Decomposition temperature:**	Not available
·**Self-igniting:**	Not available
·**The danger of explosion:**	Not available
·**Lower and upper explosion limit**	
·**Lower:**	Not available
·**Upper:**	Not available
·**Oxidizing properties:**	Not available
·**Vapour pressure:**	Not available
·**Density:**	Not available
·**Relative density:**	1.17
·**Relative vapour density:**	Not available
·**Evaporation rate:**	Not available
·**Solubility**	
·**Water:**	Not available
·**Partition coefficient n-octanol/water (log value):**	Not available
·**Viscosity**	
·**Kinematic viscosity:**	Not available
·**Dynamic viscosity:**	Not available
·**Other information**	Not available

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SECTION 10: Stability and reactivity

·**Reactivity:** No further relevant information available.

·**Chemical stability:** No further relevant information available.

·**Possibility of hazardous reactions:** No dangerous reactions known.

·**Conditions to avoid:** No further relevant information available.

·**Incompatible materials:** No further relevant information available.

·**Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

·**Information on hazard classes as defined in GHS**
·**Acute toxicity** Based on available data, the classification criteria are not met.

·**LD/LC50 values relevant for classification:**		
CAS:		
Oral	LD50	4290 mg/kg (rat)

·**Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
·**Serious eye damage/irritation:** Based on available data, the classification criteria are not met.
·**Respiratory or skin sensitization:** Based on available data, the classification criteria are notmet.
·**Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
·**Carcinogenicity:** Based on available data, the classification criteria are not met.
·**Reproductive toxicity:** Based on available data, the classification criteria are not met.
·**STOT-single exposure:** Based on available data, the classification criteria are not met.
·**STOT-repeated exposure:** Based on available data, the classification criteria are not met.
·**Aspiration hazard:** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

·**Toxicity**
·**Aquatic toxicity:** No further relevant information available.

·**Persistence and degradability:** No further relevant informationavailable.

·**Bioaccumulative potential:** No further relevant information available.

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·**Mobility in soil:** No further relevant information available.

·**Other adverse effects:** No further relevant information available.

SECTION 13: Disposal considerations

·**Waste treatment methods**
·**Recommendation:** Smaller quantities can be disposed of with household waste.

·**Uncleaned packaging:**
·**Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

·**UN number or ID number** ·**ADR/RID/ADN, IMDG, IATA**	Not applicable
·**UN proper shipping name** ·**ADR/RID/ADN, IMDG, IATA**	Not applicable
·**Transport hazard class(es)** ·**ADR/RID/ADN, IMDG, IATA** ·**Class** ·**Label**	 Not applicable -
·**Packing group** ·**ADR/RID/ADN, IMDG, IATA**	Not applicable
·**Environmental hazards:** ·**Marine pollutant:**	No
·**Special precautions for user:** ·**Hazard identification number (Kemler code):**	Not applicable -
·**Maritime transport in bulk according to IMO instruments**	Not applicable
·**Transport/Additional information:**	Not dangerous according to the above specifications.
·**UN "Model Regulation":**	Not applicable

SECTION 15: Regulatory information

·**Safety, health and environmental regulations/legislation specific for the substance or mixture**

·**Regulations on the Safety Management of Hazardous Chemical**

·**List of Hazardous Chemicals**

None of the ingredients is listed.

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·***Identification of Major Hazard Sources for Hazardous Chemicals***

None of the ingredients is listed.

·***List of Key Regulated Hazardous Chemicals***

None of the ingredients is listed.

·***Regulations on Labor Protection in Workplace with Toxic Substances***

·***Catalogue of Highly Toxic Items***

None of the ingredients is listed.

·***Regulations on the Administration of Precursor Chemicals***

·***Chemicals Precursor Chemicals***

None of the ingredients is listed.

·***List of Toxic Chemicals Strictly Restricted in China***

None of the ingredients is listed.

·***Environmental Management Measures for New Chemical Substances***

·***List of Existing Chemical Substances in China***

9003-56-9	ABS Resins
84852-53-9	Decabromodiphenyl Ethane
1309-64-4	Diantimony trioxide

SECTION 16: Other information

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The contents and format of this SDS are in accordance with GB/T 16483-2008 and GB/T 17519-2013.

DISCLAIMER OF LIABILITY
The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reason, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

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·*Date of preparation / last revision:4.11.2025*

·***Abbreviations and acronyms:***

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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