

Material Safety Data Sheet

Tairyfil

This data sheet may be complied with OSHA'S Hazard Communication Standard,
29CFR1910.1200 Standard must be consulted for specific requirements.

SECTION 1 PRODUCT AND MANUFACTURER IDENTIFICATION

Product Information

Product:	Carbon Fiber
Product Name:	TAIRYFIL
Product Specifications:	TC-33 TC-35 TC-36S TC-42S TC-55
Product Type:	Continuous Filament Chopped Fiber
Product Package:	By Bobbin and Carton

Manufacturer Information

Manufacturer Name:	TAIRYLAN DIVISION, FORMOSA PLASTICS CORPORATION
Manufacturer Address:	201, TUNG HWA N. ROAD, TAIPEI, TAIWAN, R.O.C.
Manufacturer Telephone Number:	+886-(0)2-27122211
Manufacturer Fax Number:	+886-(0)2-27134818

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SECTION 2
INGREDIENT INFORMATION

Chemical Name	Composition	Chemical Formula	CAS Number
Carbon Fiber	≥94%	Carbon	7440-44-0
Sizing	≤2%	None Disclosure	Registered

SECTION 3
PHYSICAL / CHARACTERISTICS

Boiling Point	N/A	Specific Gravity (H ₂ O=1)	1.75-1.85
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (AIR=1)	N/A	Evaporation Rate (Butyl Acetate=1)	N/A
Solubility in Water	INSOLUBLE	Appearance and Odor	BLACK- ODORLESS

SECTION 4
HAZARDS IDENTIFICATION

This product is not a health hazard according to the OSHA Hazard Communication Standard 29CFR1910.1200.

SECTION 5
POTENTIAL HEALTH EFFECTS AND FIRST AID MEASURES

1. SKIN : Contacting this product without any protection may cause the splinters imbedded in the skin and makes the skin irritated.

*FIRST AID : Wash the part of the skin which feels irritated with water and soap. Remove the imbedded fiber with tweezers or sterile needle if the splinter is visible. Get the medical attention if the skin turns red, pain, or swollen.

2. EYES : Exposing with the nuked eyes may cause irritated.

*FIRST AID : Flush the eye with plenty of water immediately for 20 minutes at least. After washing, if the eye still can not stop winking or tearing, get the medical attention.

3. INHALATION : The long continuous filament is not supposed to be inhaled. The fragment of tiny filament might be spread into the air and inhaled by breathing without any protection, which might cause irritation.

*FIRST AID : Move the victim to outdoor and provide fresh air. If the victim still has the breath difficulty, get the medical attention immediately.

4. INGESTION/SWALLOWED : This is not the normal route of exposure and NOT expected to happen in standard process. Mass ingestion for this product will cause the irritation of digestive system or respiratory system and hurt the gastrointestinal or respiratory tract.

*FIRST AID : If the ingestion happens in an abundant amount of this product, DO NOT induce vomiting. Get the medical attention immediately.

5. CHRONIC EFFECTS/CARCINOGENICITY : There is no date of chronic effects or carcinogen reported at the present time. This product is not listed in NTP, IARC, or OSHA.

SECTION 6
PERSONAL PROTECTION DATA

Respiratory System Protection

1. Keep good ventilation in workplace.
2. In workplace, always wear the dust mask which covers both the nose and the mouth.
3. The mask should be cleaned regularly.

Eyes Protection

1. Wear the goggles or protective glasses in the workplace.
2. The preserve should be cleaned regularly.

Hand and Skin Protection

1. Never touch the carbon fiber barehanded. Wear the protective gloves before contact this product with the hand. If the barehanded touch is not avoidable, wash hands with water and soap completely after use.
2. In workplace, wear the long-sleeve protective clothes, such as the coveralls or an overall.
3. Rinse the protective clothes and the protective gloves regularly and separated from normal clothes when washing.

SECTION 7
FIRE AND EXPLOSION HAZARD DATA

Flash Point	Not Applicable
Flammable Limits	Not Applicable
Autoignition Temperature	Not Applicable

Low Explosive Level	Not Applicable
Upper Explosive Level	Not Applicable

The filament of carbon fiber is not supposed to burn or explode even in extreme high temperature. It is possible that the sizing covering the filament be etheralized when over 100°C, but not be expected to burn or explode.

Extinguishing Media

CO₂, Dry Chemical Foam, Water.

Special Fire Fighting Procedures

1. The breath apparatus is necessary when putting out the fire.
2. The extinguisher must be used in a safe distance.
3. Water does not always work for a large fire. When using water as the quencher, it is important to ensure the carbon fiber is not electrified.

Unusual Fire and Explosion Hazards

Not applicable. However, be aware of the incineration of this product may generate airborne fiber which may cause electrical malfunction.

SECTION 8
STABILITY AND REACTIVITY DATA

Stability :	Stable
Conditions to Avoid :	None
Incompatibility (Materials to avoid) :	Strong Oxidizing Agent e.g. Fluorine
Hazardous Decomposition or Byproducts :	None
Hazardous Polymerization :	None

SECTION 9
TOXICOLOGICAL INFORMATION

Acute Toxicity :	N/A
Sub-chronic Toxicity :	N/A
Chronic Toxicity :	N/A
Carcinogenic effect :	N/A
Mutagenic effect :	N/A
Irritant property :	N/A
Teratogenic effect :	N/A

SECTION 10
ECOLOGICAL INFORMATION

Biodegradability :	N/A
Bioaccumulation :	N/A
Fish Toxicity :	N/A

SECTION 11
HANDLING AND STORAGE INFORMATION

1. A cool and dry surrounding is ideal to preserve this product.
2. Wear the protective equipments and protective clothes before taking this product.
3. Wash hands with soap and water after handling.

SECTION 12
DISPOSAL INFORMATION

1. Bury as the burial waste in landfill
2. ATTANTION: DO NOT incinerate this product because the airborne filament may cause electrical malfunctions.

SECTION 13
TRANSPORTATION INFORMATION

This product is not the hazardous goods under DOT, IMO, ICAO, IATA, or UN shipping regulations.

SECTION 14
OTHER INFORMATION

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