



NMG COMPOSITES CO.,LTD

Material Safety Data Sheet–Fiberglass

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: **NMG Composites Co.,Ltd**
Address Wanli Village,Chongfu Town
Tongxiang Zhejiang China 314511

Tel: +86 573 88849111
Fax: +86 573 88849112
Web: www.nmgchina.cc

CHEMICAL PRODUCT IDENTIFICATION:

Assembled Roving, Direct Roving, Dry Chopped Strands, Wet Chopped Strands, Woven Roving, Stitch Chopped Strand Mat, Power Chopped Strand Mat, Stitch Combo Mat, Woven Roving Combo Mat, Glass Filament Yarn, Marketable Cake, Cut Strands, Texturized Yarn.

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients of Products:

Product Name	Glass, %	Size, %	Binder, %	Water, %
Assembled Roving	≥97.7	≤2.3	/	/
Direct Roving	≥99.2	≤0.8	/	/
Dry Chopped Strands	≥97.9	≤2.1	/	/
Wet Chopped Strands	87.8-92.0	≤0.2	/	8.0-12.0
Woven Roving	≥99.2	≤0.8	/	/
Stitch Chopped Strand Mat	≥91.7	≤1.0	≤7.3	/
Powder Chopped Strand Mat	≥93.7	≤0.7	≤5.6	/
Stitch Combo Mat	≥96.8	≤1.0	≤2.2	/
Multi-axial Fabrics	≥96.8	≤1.0	/	/
Woven Roving Combo Mat	≥96.8	≤1.0	≤2.2	/
Glass Filament Yarn	≥98.8	≤1.2	/	/
Texturized Yarn	≥99.4	≤0.6	/	/

CAS No:

No Information available.

SECTION 3 – HAZARDS IDENTIFICATION

Classification of Hazards:

No information available.

Routes of Entry:



NMG COMPOSITES CO.,LTD

Ingestion, inhalation, skin and eye contact.

Health Effects:

Ingestion: Ingestion of the material is unlikely. However, ingestion of the material may cause gastrointestinal disturbance.

Inhalation: Breathing fiberglass dusts and particulates may cause irritation of the nose, throat and respiratory tract.

Skin contact: Fiberglass dusts and particulates may cause temporary irritation.

Eye contact: Fiberglass dusts and particulates may cause temporary irritation to the eyes.

Environmental Effects:

Long-term exposure to fiberglass environment may cause temporary effects.

Inflammation and Explosion Hazards:

No information available.

SECTION 4 – First – aid measures

Skin Contact:

If irritation occurs to the skin, rinse with soap and water. Make sure to refrain from rinsing with warm water since warm water will make the skin pores open to allow fiberglass to penetrate more deeply. If fiberglass penetrates the skin, use a wash cloth to help pull out the fiberglass. To avoid further irritation, do not rub or scratch affected skin. If irritation persists, get medical help. Make sure to refrain from using compressed air to remove fiberglass from the skin. Use adhesive tape to remove fiberglass from the skin.

Eye Contact:

Immediately flush eyes with clean water for at least 15 minutes. If irritation persists, get medical help.

Inhalation:

If inhaled, immediately remove the affected person to fresh air. If irritation persists, get medical help.

Ingestion:

Ingestion – Normally, ingestion of this material is unlikely. If it does occur, watch the person for several days to make sure that gastrointestinal disturbance does not occur. Do not let the person vomit unless required by medical personnel. If disturbance persists, get medical help.

SECTION 5 – Fire Fighting Measures

Flammability Classification:

Non-flammable.

Hazardous Combustion Products:

Primary combustion products are carbon monoxide, hydrogen, carbon dioxide and water. Other undetermined compounds can be released in small quantities.

Fire-Fighting Methods:

Use dry chemical, foam, carbon dioxide and water as extinguishing media.



NMG COMPOSITES CO.,LTD

Fire-Fighting Instructions:

Fire fighters must use self-contained breathing apparatus and wear full protective gear.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

In case of release to land, the material should be scooped up as waste and put into a special container and stored in a designated area. In case of release of water, the material will sink and disperse along the bottom of waterways or ponds and can not be easily removed after it is waterborne. However, the material is non-hazardous in water.

SECTION 7 - HANDLING AND STORAGE

Handling:

Try to prevent the packing material from be damaged and keep the product inside the packing material to minimize the generation of dusts. Maintain a clean work environment and avoid generation of fiberglass fragments from improper handling.

Storage:

No special requirements for storage.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Highest Permissible Concentration:

National and international hygiene standards are as follows:

Component	Permissible Exposure Limit of OSHA (8-hr Average Weight)	Permissible Exposure Limit of ACGIH (8 hr Average Weight)
Non-respirable fibers and particulates	5 mg/m ³ (Total dust)	5 mg/m ³ (Inhalable fraction)
Respirable particulates	5 mg/m ³ (Respirable fraction)	/
Size of respirable particulates	Diameters of less than 3.0 um	Diameters of less than 3.5 um

Monitoring Method:

Gas chromatography.

Engineering Control:

Production areas are closed off and a required relative humidity is maintained.

Respiratory Protection:

Wear a suitable mask when working in an environment where dust concentration is high.

Eye Protection:

Wear safety glasses and face shield.

Body Protection:



NMG COMPOSITES CO.,LTD

Normal loose working clothing (long-sleeved shirts and long pants) is recommended. Skin irritation occurs primarily at the contact areas such as around the neck and waist.

Hand Protection:

Wear gloves. Skin irritation occurs primarily at the contact areas such as wrists and between the fingers.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Product Appearance and Properties:

White or off-white solid; No odor.

Flash Point:

Not applicable

pH Value:

Not applicable.

Ignition Temperature:

Not applicable

Melting Point:

>800°C.

Explosion Upper Limit:

Not applicable

Boiling Point:

Not applicable.

Explosion Lower Limit:

Not applicable

Relative Density:

2.6 Times that of water.

Solubility (in Water):

Insoluble

Relative Vapor Density:

Not applicable

**Product Use:**

Fiberglass is an inorganic nonmetal material and is used as reinforcement for thermoplastic and thermosetting resins.

SECTION 10 - STABILITY AND REACTIVITY

Stability:

Stable.

Materials to Avoid:

None.

Conditions to avoid:

None.

Hazardous Polymerization

Will not occur.

Hazardous Decomposition Products

Size and binder will decompose thermally. The primary combustion products are carbon monoxide, hydrogen, carbon dioxide and water. Other undetermined compounds could be released in small quantities.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity:

None.

Chronic Toxicity:

Fiber glass has been found to be durable in the human lung; however, if glass fibers are non-respirable, their durability is unimportant.

Irritability:

Fiberglass dusts may cause irritation to skin and eye. Ingestion of fiberglass may cause irritation to the throat, stomach and gastrointestinal tract. Inhalation may cause coughing, sneezing and nose and throat irritation. Experience indicates that inhalation of a large amount of fiberglass may cause difficulty in breathing, congestion and chest tightness.

Carcinogenicity:

The International Agency for Research on Cancer (IARC), agency of the World Health



NMG COMPOSITES CO.,LTD

Organization (WHO), has determined that fiberglass is a non-carcinogenic material because the evidence is inadequate to prove that fiberglass can cause humans and experimental animals to develop cancer.

Fiber particulates are classified as respirable and non-respirable. Respirable fibers can penetrate into the lung bottom. According to the WHO, man-made fibers with diameters of 3.0 um or more are non-respirable. According to the NIOSH, man-made fibers with diameters of more than 3.5 um are non-respirable.

Fiber particulates are classified as respirable and non-respirable. Respirable fibers can penetrate into the lung bottom.

Human respiratory system consists of a narrow and curved passage which prevents relatively big and non-respirable fibers from entering the lung bottom. Therefore the fibers accumulates at the surface of the respiratory tract and in the nose or throat. Normal physiological function can clean away the fibers in time. Chopping, crushing or severe mechanical processing of fiberglass products during manufacture or use may generate a large amount of small particulates, some of which may be respirable.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

No data available for this product. Fiberglass products are not listed as a material harmful to animals, plants and fish.

Biodegradability:

Not degradable.

Non-Biodegradability:

Not degradable.

SECTION 13 - DISPOSAL CONSIDERATIONS

Nature of Waste:

Industrial solid waste.

Waste Disposal Method:

Waste material should not be discharged randomly and should be land filled.

Disposal Instructions:

Dispose waste material according to local environmental regulations.



SECTION 14 - TRANSPORT INFORMATION:

Classification and Code of Hazards:

None.

UN Code:

None.

Packing Mark:

None.

Packing Category

None.

Packing Method:

None.

Transport Instructions:

Rolling and moisture should be avoided in transit.

SECTION 15 - REGULATORY INFORMATION

National Safety Control Regulations for Chemicals:

Chemical Safety Control: No information available.

Safety Regulations for Chemical Use at Operational Fields : No information available

Environmental Protection Law: No information available.

SECTION 16 - OTHER INFORMATION

Preparation Date: Jan 2012

Prepared by: Technology Center Of NMG COMPOSITES Co., Ltd.

浙江联洋新材料股份有限公司
NMG COMPOSITES CO.,LTD.