

SAFETY DATA SHEET

TO COMPLY WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR.1910.1200 & THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier

Substance Name: ORCA Assembled Roving, Direct Roving, Dry Chopped Strands, Wet Chopped Strands, Woven Roving, Powder Chopped Strand Mat, Emulsion Chopped Strand Mat, Glass fiber stitched fabrics, Glass fiber wet-laid mat, Glass Filament Yarn

1.2 Relevant Uses of the Substance or mixtures and uses advised against

Recommended Use:	For winding glass pipe, tank; suppress auto parts, bathtubs; for hand lay – up fiberglass molding process; reinforced plastics, etc.
Uses advised against:	No information available

1.3 Details of the Supplier of the Safety Data Sheet

ORCA Composites
1468 Northgate Blvd
Sarasota, FL 34234
T 206-782-0660
F 888-782-0662
www.OrcaComposites.com

1.4 Emergency Telephone Number

Emergency Number: CHEMTREC: Domestic - 800-424-9300
International- 703-527-3887

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC
Not classified

2.2 Label elements

Symbols/Pictograms: Not applicable.
Signal word: Not applicable.
Hazard Statements: Not applicable.
Precautionary Statements: Not applicable.

2.3 Other hazards

No information available

3. COMPOSITION / INFORMATION ON INGREDIENTS

Product Name	Glass, %	Size, %	Binder, %	Water, %
Assembled Roving	97.70-99.85	0.15 ~2.10	/	0~0.20
Direct Roving	99.00-99.85	0.15 ~0.80	/	0~0.20

Dry Chopped Strands	97.95~99.35	0.65 ~1.95	/	0~0.10
Wet Chopped Strands	86.85-94.00	0 ~ 1.15	/	6.00~12.00
Woven Roving	99.00-99.60	0.40 ~ 0.80	/	0~0.20
Powder Chopped Strand Mat	92.20-97.40	0.30~ 0.60	2.30-7.00	0~0.20
Emulsion Chopped Strand Mat	91.20-96.70	0.30~ 0.60	3.00-8.00	0~0.20
Glass fiber stitched fabrics	96.80~99.60	0.40 ~3.00	/	0~0.20
Glass fiber wet-laid mat	89.50~96.00	4.00~10.00	/	0 ~0.50
Glass Filament Yarn	98.60~99.20	0.70~1.80	/	0~0.20

Fiber glass: 659997-17-3 Size: Not available

Size:

Size is a mixture of chemicals applied to the glass strands. Most of this mixture is made up of basically non-reactive high molecular weight polymers, often natural ingredients (starches) with no reactive sites, which are not listed as substances in the EINECS nor in the ELINCS appendices.

Sometimes size maybe also contain substances of organo-silane family or other substances. The manufacturer considers this risk as negligible as, even though listed as dangerous products, the concentration is extremely low (under 0.1% of total weight) and they are polymerized during the production of glass fibers production.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

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.

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

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.

4.2 Most important symptoms and effects, both acute and delayed

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.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Non-flammable. However, the packing material may burn. Use dry chemical, foam, carbon dioxide and water as extinguishing media.

Unsuitable extinguishing media: No information available

5.2 Special hazards arising from the substance or mixture

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

5.3 Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust generation. Avoid breath dust.

6.2. Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

Scooped up and put into a container for disposal.

6.4. Reference to other sections

See Section 7 for more information

See section 8 for more information

See section 13 for more information

7. HANDLING AND STORAGE

7.1. Precautions for safe 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.

7.2. Conditions for safe storage, including any incompatibilities

Keep product in its packaging until use to minimize potential dust generation.

7.3. Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component: Fiber glass CAS#659997-17-3	Permissible Exposure Limit of OSHA (8-hr Average Weight)	Permissible Exposure Limit of ACGIH (8 hr Average Weight)
Total Dust	15 mg/m ³	10 mg/m ³
Respirable particulates	5 mg/m ³	3 mg/m ³
Respirable Fiber	/	1 fiber/ml

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls

Engineering Controls

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

Personal protective equipment

Eye/face protection: Wear safety glasses and face shield.

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

Skin and body protection: 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.

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

Environmental exposure controls

Do not allow into any sewer, on the ground or into any body of water

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Solid
Color	white or off-white
Odor	Odorless
Odor Threshold	No information available
pH	Not applicable.
Melting point/freezing point	> 800°C
Boiling point / boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non flammable.
Upper flammability limit:	Not applicable.
Lower flammability limit:	Not applicable.
Vapor Pressure	Not applicable.
Vapor density	No information available
Density	No information available
Relative density	2.6 Times that of water.
Bulk density	No information available
Specific gravity	No information available
Water solubility	Insoluble
Partition coefficient	Not applicable.
Autoignition temperature	Not applicable.
Decomposition temperature	No information available
Kinematic viscosity	Not applicable.
Explosive properties	Not an explosive
Oxidizing properties	Not applicable

9.2. Other information

No information available

omposites

10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

None.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity: No information available.

Skin corrosion/irritation: Fiberglass dusts may cause irritation to skin.

Serious eye damage/eye irritation: Fiberglass dusts may cause irritation to eye.

Sensitization: No sensitization responses were observed.

Germ cell mutagenicity: No information available.
Carcinogenicity: Fiberglass is a non-carcinogenic material.
Reproductive toxicity: No information available.
STOT - single exposure: No information available.
STOT - repeated exposure: No information available.
Aspiration hazard: No information available.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment information is not available as chemical safety assessment not conducted.

12.6. Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging: Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

- 14.1 **UN Number:** Not regulated
- 14.2 **Proper shipping name:** Not regulated
- 14.3 **Hazard Class:** Not regulated
- 14.4 **Packing Group:** Not regulated
- 14.5 **Environmental hazards:** Not applicable
- 14.6 **Special precautions:** Rolling and moisture should be avoided in transit.
- 14.7 **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

International Inventories

Component	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
CAS NO.: 65997-17-3	Listed	Listed	Listed	Listed	Listed	Listed	Listed	Listed

15.2. Chemical safety assessment

No information available

16. OTHER INFORMATION

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Key or legend to abbreviations and acronyms used in the safety data sheet

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Full text of H-Statements referred to under section 3

Not applicable.

Full text of R-phrases referred to under sections 2 and 3

Not applicable.

ORCA Composites believes the law requires us to inform you that detectable amounts of any of the listed chemicals might be present in ORCA products. Based on a review of the list, ORCA products, like all synthetic and naturally occurring chemical substances, may conceivably contain trace contaminants of some of the listed substances. While not necessarily added to our products as ingredients, some of the listed chemicals may be present in the raw materials as received from suppliers over which we have no control.

Preparation Date: 3-7-16

Prepared by: Kevin Aber

Comments: This Safety Data Sheet was prepared using information provided by Orca Composites

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and ORCA Composites assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.