SAFETY DATA SHEET

Creation Date 29-May-2015 **Revision Date** 11-Nov-2020 **Version** 6

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Continuous Filament Glass Fiber Products: Milled Fiber

Synonyms REV1, REV4, REV7, REV8, VS1304, VS1360

Product Code OCCM00101

Recommended Use Industrial

Supplier Address
Owens Corning Composite Materials, LLC
One Owens Corning Parkway
Toledo, Ohio 43659

Company Phone Number 1-800-GET-PINK or 1-800-438-7465
24 Hour Emergency Phone Number Chemtrec 1-800-424-9300 or 1-703-741-5970 CCN17393
Emergency Telephone 1-419-248-5330 (after 5 pm ET and weekends)

E-mail address productcompliance@owenscorning.com
Company Website http://www.owenscorning.com/

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status This product is not classified as hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
This product is considered an article. 29 CFR 1910.1200(c) definition of an article is as follows: "Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees

WHMIS Regulatory Status This product is not classified as hazardous according to the Canadian Hazardous Products Regulation SOR/2015-17
Continuous Filament Glass Fiber (CFGF) Products are manufactured articles. The definition of manufactured article given by the Canadian Hazardous Products Act R.S.C., 1985, c. H-3 is: any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product

Label elements

This product is not classified according to Globally Harmonized System (GHS)

Hazards not otherwise classified (HNOC) • Not applicable

Other Information • As manufactured continuous filament glass fibers are non-respirable. May cause temporary skin and mucous membranes itching due to mechanical abrasion effect of fibers. Under normal conditions of use, these products may release dust and non-respirable fibers (Particulates Not Otherwise Regulated). Under severe process conditions (e.g. shredding, crushing), these products may release very small amount of respirable particulate, some of which may be fiber-like in terms of l/d ratio (so-called "shards").

Unknown acute toxicity • Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Components
Continuous filament glass fiber > 99 %
Sizing < 1 %

Chemical name	CAS No.	Weight-%	Trade Secret
Continuous filament glass fiber, non-respirable	-	> 99	*

*The exact percentage (concentration) of composition has been withheld as a trade secret or for covering a group of substantially similar products

The remaining components of this product are non-hazardous or are in a small enough quantity as to not meet regulatory thresholds for disclosure. These components contain no substances or impurities which would influence the classification of this product

4. FIRST AID MEASURES

Description of First Aid Measures

Eye contact
• DO NOT rub or scratch 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: Get medical advice/attention

Skin contact
• Wash off immediately with soap and plenty of cold water
• DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of fibers and dust
• DO NOT rub or scratch affected area
• If skin irritation persists, call a physician
• Use a wash cloth to help remove fibers and dust
• If fibers are seen penetrating from the skin, the fibers can be removed by applying and removing adhesive tape so that the fibers adhere to the tape and are pulled out of the skin

Inhalation
• Move victim to fresh air
• If symptoms persist, call a physician

Ingestion
• Rinse mouth with water and drink water to remove fibers from the throat
• If symptoms persist, call a physician

Note to physicians • Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable properties • Not flammable. Only the organic part of the product is combustible and could release small quantities of undetermined hazardous compounds in case of major and prolonged heat or fire

Suitable extinguishing media
• Use CO2, dry chemical, or foam
• Water spray or fog

Unsuitable extinguishing media • No

Specific hazards arising from the chemical • No information available

Explosion data
Sensitivity to Mechanical Impact • Not impact sensitive
Sensitivity to Static Discharge • Not sensitive

Protective equipment and precautions for firefighters • As in any fire, wear self-contained breathing apparatus (positive-pressure), MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions • Avoid contact with eyes and skin

Environmental precautions • See Section 12 for ecotoxicology additional information

Methods and material for containment and cleaning up

Methods for containment • Prevent further leakage or spillage if safe to do so

Methods for cleaning up
• Use personal protective equipment as required
• Avoid creating dust
• Take up mechanically, placing in appropriate containers for disposal
• Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination

7. HANDLING AND STORAGE

Precautions for safe handling • Avoid dust formation

Conditions for safe storage, including any incompatibilities

Storage Conditions
• Store in a manner which will minimize dust generation and accumulation
• Keep product in packaging until use to minimize potential dust generation

Incompatible materials • None known

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines As manufactured continuous filament glass fibers are non-respirable. Microscopic examination of dust from milled fiber demonstrated the presence of small amounts of respirable dust particles. Among these respirable particles, some were fiber-like in terms of l/d ratio (so-called “shards”)(see Section 11)

Chemical name	ACGIH TLV	OSHA PEL	NIOSH REL
Continuous filament glass fiber, non-respirable -	TWA: 1 fiber/cm3 respirable fibers: length >5 µm, diameter less than 3 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m³ inhalable particulate	-	-

	matter		

NIOSH REL Immediately Dangerous to Life or Health

Engineering Controls
- Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits
- Local exhaust ventilation should be provided at areas of cutting, milling or other similar processing to remove airborne dust and fibers

Individual protection measures, such as personal protective equipment

Eye/face protection
- Wear safety glasses with side shields (or goggles)

Skin and body protection
- Wear protective gloves
- Wear long-sleeved shirt and long pants

Respiratory protection
- If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

General Hygiene Considerations
- Wash hands before breaks and immediately after handling products
- Remove and wash contaminated clothing before re-use

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid - fiber with diameter larger than 6 micron
Appearance	Powder, milled glass fiber
Odor	Odorless
Color	White
pH value	not applicable
Melting point / freezing point	not applicable
Boiling point / boiling range	not applicable
Flash point	not applicable
Evaporation rate	Not applicable
Vapor pressure @20 °C (kPa)	not applicable
Density VALUE	not applicable
Autoignition temperature	Not applicable
Viscosity	not applicable
Explosive properties	Not an explosive
Oxidizing properties	Not an oxidizer
Specific Gravity	not applicable
Softening point	> 800°C
Liquid Density	not applicable

10. STABILITY AND REACTIVITY

Reactivity
- No known reactivity

Chemical stability
- Stable under normal conditions

Possibility of Hazardous Reactions
- None under normal processing conditions

Conditions to avoid
- None known

Incompatible materials
- None known

Hazardous Decomposition Products
- Other undetermined compounds could be released in small quantities

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Continuous filament glass fibers are not respirable according to the World Health Organization (WHO) definition. Respirable fibers have a diameter (d) smaller than 3µm, a length (l) larger than 5µm and a l/d-ratio larger than or equal to 3. Fibers with diameters greater than 3 microns, which is the case for continuous filament glass fiber, do not reach the lower respiratory tract and, therefore have no possibility of causing serious pulmonary disease. Continuous filament glass fibers do not possess cleavage planes which would allow them to split length-wise into fibers with smaller diameters, rather they break across the fiber, resulting in fibers which are of the same diameter as the original fiber with a shorter length and a small amount of dust. Microscopic examination of dust from highly chopped and pulverised glass demonstrated the presence of small amounts of respirable dust particles. Among these respirable particles, some were fiber-like in terms of l/d ratio (so-called “shards”). It can be clearly observed however that they are not regular shaped fibers but irregular shaped particles with fiber-like dimensions. To the best of our knowledge, the exposure levels of these fiber-like dust particles measured at our manufacturing plants are of the order of magnitude between 50 to 1000 below existing applicable limits
The International Agency for Research on Cancer (IARC) in June, 1987, and in October, 2001 (see IARC Monographs on the Evaluation of Carcinogenic risks to humans – Man-made Vitreous Fibers – Volume 81), categorized continuous filament fiber glass as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a confirmed, probable or even possible cancer-causing material

Components Information
Note: These products are not classified as dangerous goods according to international transport regulations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No sensitization responses were observed.
Germ cell mutagenicity None known.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Continuous filament glass fiber, non-respirable -	-	Group 3	-	-

ACGIH (American Conference of Governmental Industrial Hygienists)
Continuous filament glass fibers are classified as A4 - Not Classifiable as a Human Carcinogen
IARC (International Agency for Research on Cancer)
The International Agency for Research on Cancer (IARC) in June, 1987, and in October, 2001 (see IARC Monographs on the Evaluation of Carcinogenic risks to humans – Man-made Vitreous Fibers – Volume 81), categorized continuous filament fiber glass as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a confirmed, probable or even possible cancer-causing material
NTP (National Toxicology Program)
Continuous filament glass fibers are not listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
STOT - single exposure No known effects under normal use conditions.
STOT - repeated exposure None under normal use conditions.
Target Organ Effects No known effects under normal use conditions.
Aspiration hazard Not applicable.

12. ECOLOGICAL INFORMATION

Persistence and degradability	No information available
Bioaccumulation	No information available
Other adverse effects	• No information available

13. DISPOSAL CONSIDERATIONS

Disposal of wastes	• Disposal should be in accordance with applicable regional, national and local laws and regulations
Contaminated packaging	• Do not reuse packaging
US EPA Waste Number	• No EPA Waste Number applies to the product

14. TRANSPORT INFORMATION

Note:	These products are not classified as dangerous goods according to international transport regulations
DOT	Not regulated
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated
RID	Not regulated
ADR	Not regulated
ADN	Not regulated

15. REGULATORY INFORMATION

Continuous filament glass fiber products are articles. Articles are exempted from registration or listing under chemicals inventories like TSCA (USA), DSL/NDSL (CAN), REACH (EU), ENCS (JP), IECSC (CN), KECL (KR), PICCS (PH), AICS (AUS), TCSI (Taiwan).

International Inventories

Legend:
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

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any

chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product is not regulated under California Proposition 65

U.S. State Right-to-Know Regulations

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By	FCs
Creation Date	29-May-2015
Revision Date	11-Nov-2020
Revision Note	complete review

Disclaimer
Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use

End of Safety Data Sheet