



SAFETY DATA SHEET

Creation Date 29-May-2015

Revision Date 29-May-2017

Version 3

1. IDENTIFICATION

Product Name	Veil (pva)
Synonyms	VL AE451, VL AE459, VL AE959, VL AH927, VL EB007, VL F4017-AH24, VL W35-FA8
Product Code	OCCM00004
Recommended Use	Industrial
Manufacturer 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
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 chemical is not considered hazardous by 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 considered hazardous by 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

The product contains no substances which at their given concentration, are considered to be hazardous to health

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 (Particles 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"). See Section 8 for Exposure Limit Data

Unknown acute toxicity • 0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Continuous filament glass fiber 60 - 100 %
Cured polyvinyl alcohol binder 0 - 40 %

Chemical Name	CAS No.	Weight-%	Trade Secret
Continuous filament glass fiber, non-respirable	65997-17-3	60 - 100	*
Citric acid	77-92-9	0 - 0.1	*

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

Comments 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**
- DO NOT rub or scratch affected area
 - DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of the fibers
 - Wash skin with soap and water
 - Use a wash cloth to help remove fibers
 - 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**
- Accidental ingestion of this material is unlikely
 - 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

- None

Specific hazards arising from the chemical

- No information available

Explosion data

Sensitivity to Mechanical Impact • None

Sensitivity to Static Discharge • None

Protective equipment and precautions for firefighters

- As in any fire, wear self-contained breathing apparatus pressure-demand, 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

- Prevent and/or minimize 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 not respirable. Under normal conditions of use, these products may release dust and non-respirable fibers (Particles Not Otherwise Regulated). Under severe process conditions (e.g. shredding, crushing), they may release very small amount of respirable particulate, some of which may be glass shards (see section 11).

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH REL
Continuous filament glass fiber, non-respirable 65997-17-3	TWA: 1 fiber/cm ³ respirable fibers: length >5 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/m ³ inhalable particulate matter		
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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 @20°C	Solid - fiber with diameter larger than 6 micron
Appearance	Glass fiber veil
Odor	Organic
Color	White
pH value	not applicable
Melting point / freezing point	not applicable
Boiling point / boiling range	not applicable
Flash point	not applicable
Vapor pressure @20 °C (kPa)	not applicable mm Hg @ 20°C
Density VALUE	not applicable
Water solubility	No information available
Autoignition temperature	No information available not applicable
Explosive properties	Not an explosive
Oxidizing properties	Not an oxidizer
Specific Gravity	not applicable
Softening point	> 800°C
Density VALUE	not applicable

10. STABILITY AND REACTIVITY

- Reactivity** • No known reactivity
- Chemical stability** • Stable under recommended storage conditions
- Possibility of Hazardous Reactions** • None under normal processing
- Conditions to avoid** • None known

Incompatible materials

• None known

Hazardous Decomposition Products • Thermal decomposition can lead to release undetermined compounds 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 fiber glass as a confirmed, probable or even possible cancer causing material

Component Information

Chemical Name	Oral LD50	LD50/dermal/rat - NO UNITS (Wizards mg/kg)	Inhalation LC50
Citric acid 77-92-9	= 3 g/kg (Rat)	-	-

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

None known.

Germ cell mutagenicity

None known.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 3 - Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity
 STOT - single exposure
 STOT - repeated exposure
 Target Organ Effects
 Aspiration hazard

This product does not contain any known or suspected reproductive hazards.
 No known effects under normal use conditions.
 None under normal use conditions.
 No known effects under normal use conditions.
 Not applicable.

12. ECOLOGICAL INFORMATION

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Citric acid 77-92-9	-	1516: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	-

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 container

US EPA Waste Number • No EPA Waste Number are applicable

14. TRANSPORT INFORMATION

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/NDL (CAN), REACH (EU), ENCS (JP), IECSC (CN), KECL (KR), PICCS (PH), AICS (AUS).

International Inventories

Chemical Name	TSCA	DSL	NDL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Continuous filament	X	X		X		X	X	X	X	X

glass fiber, non-respirable 65997-17-3										
Citric acid 77-92-9	X	X		X		X	X	X	X	X

Legend:

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

DSL/NDL - 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

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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	29-May-2017
Revision Note	Review of Section 2

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