GPE GASKETS

LEADER IN HIGH TEMPERATURE SOLUTIONS

SAFETY DATASHEET

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Identification of the substance

Impregnated fiberglass paper

Identification of the company

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2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Primary route(s) of exposure Inhalation

Acute Exposure to glass fibers sometimes causes irritation of the skin. Less frequently irritation of the eyes, nose or throat may occur. Ingestion may cause short-term irritation of the stomach and intestines. See section 8 of MSDS for exposure controls.

Chronic There are no known health affects connected with long term use or contact with this product. See section 11 of MSDS for toxicology information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical/common name	C.A.S. Number	% By weight (opt)
Chopped Continuous Strand Fiberglass	65997-17-3	90-97
Polyvinyl Alcohol	9002-89-5	3-10

See section 8 of MSDS for the data on the exposure limits.

GPE Paper is coated with a specially developed GPE coating, to manufacture gastight plastic elastic gasket. All Gaskets are manufactured in our own production facility in the Netherlands.

4. FIRST AID MEASURES

EMERGENCY/FIRST AID PROCEDURES

Skin Rinse contacted areas with room temperature to cool water, then wash gently mild soap & water. If fiberglass becomes imbedded, seek medical attention.

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Eyes Flush eyes with clear water for at least 15 minutes – seek medical attention.

Inhalation Move person to fresh air. Seek medical attention if irritation persists.

Ingestion Ingestion of this material in not likely. If it does occur watch for several days to make sure intestinal blockage does not occur. If there is blockage seek medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing Media Use dry chemical, foam, carbon dioxide or water spray.

Special fire fighting instructions In a sustained fire, self-contained breathing apparatus, (SCBA), should be worn.

Flash Point 230°C

Flammability limits N/A

Lower explosive limit None – does not support flame

Upper explosive limit None – does not support flame

Auto ignition temperature N/A

Special exposure hazards from fire
Hazardous decomposition products of combustion from sizing and binders may be released in a sustained fire. The larger part of the product is non-flammable fibreglass. In a sustained fire, sizing and binders may decompose, releasing combustion products including carbon dioxide, carbon monoxide and water. Additionally, there are many chemicals that can evolve during any partial decomposition of chemical products. The amounts or identities cannot be predicted and can differ in each situation.

6. ACCIDENTAL RELEASE MEASURES

Action to take for spills/leak Wet, sweep or vacuum fibrous dust.

7. HANDLING AND STORAGE

Precautions
Keep airborne dust concentrations below regulated levels. For optimum performance, store at 27ºC or less and relative humidity less than 65%. Not an electrical conductor. Can accumulate static charge. Store in original packaging in dry area whilst awaiting use.

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8. EXPOSURE CONTROL / PERSONAL PROTECTION

ENGINEERING CONTROLS/WORK PRACTICES

Ventilation Local exhaust ventilation (if needed) to maintain appropriate airborne dust levels.

PERSONAL PROTECTIVE EQUIPMENT/PROTECTIVE MEASURES

Respiratory protection
Some applications of these products may not require respiratory protection for fibreglass. However, if airborne glass concentrations exceed the OSHA permissible limits or if irritation occurs, a properly fitted NIOSH/MSHA approved disposable dust respirator such as the 3M model 8210 (formerly 8710) or model 9900 (in high humidity environments) or equivalent should be used. Use respiratory protection in accordance with your company's respiratory protection program, local regulations and OSHA regulations under CFR 1910.134.

Protective clothing
Loose fitting long sleeved shirt that covers to the base of the neck, long pants and gloves. Skin irritation is known to occur chiefly at pressure points such as around neck, wrist, waist and between fingers. Work clothing should be laundered separately from other clothing before reuse.

Eye protection Safety glasses with side shields or goggles

Work/hygienic practices Wash thoroughly with soap and water after use.

EXPOSURE GUIDELINES

Ingredient
• Chopped Continuous Filament Fiberglass (>5 micron in diameter)

ACGIH TLV: (8-hr TWA)	5mg/m^3 inhalable fraction 1f/CC respirable fibers
OSHA PEL: (8-hr TWA)	10mg/m^3 total 5mg/m^3 respirable

Note: OSHA does not prescribe a Permissible Exposure Limit (PEL) but relies on the PEL-TWA's for nuisance dust as noted.

• Polyvinyl Alcohol – Exposure Limit – none estimated

Air sampling/analytical methods
Gravimetric total dust NIOSH Sampling & Analytical Method 0500; the Gravimetric respirable dust NIOSH Method 0600 and the NIOSH 7400 B Fiber Counting Rules; and IOM Sampler for meeting ACGIH criteria for inhalable particulate mass.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Solid.
Color and odor	: Grey/black
Ph	: N/a
Melting point	: >650°C
Boiling point	: N/a
Flash point	: 232°C
Evaporative rate (n-butyl acetate = 1)	: N/a
Flammability limits	: N/a
Lower explosive limit	: None - does not support flame.
Upper explosive limit	: None – does not support flame.
Vapor pressure: (mm hg @ 20°C)	: N/a
Percent solubility in water	: Insoluble
Specific gravity (water = 1)	: 0.20
Auto ignition temperature	: N/a
Viscosity	: N/a
Percent volatile by volume	: N/a
Pour point	: N/a

10. STABILITY AND REACTIVITY

Stability
Stable under normal conditions of use and storage

Incompatibility
Strong Acids

Hazardous Polymerization
Will not occur

Possible Hazardoes Decomposition products
None known. Combustion products from organic binder may include carbon monoxide, carbon dioxide, nitrogen oxides & various hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Factors in fiber toxicity include fiber dimensions, and durability and degree of exposure.

Fiber dimensions
Fibers are either non-respirable or respirable. Respirable fibers can penetrate to the “deep” lung. According to the World Health Organization (WHO), man made-mineral fibers with diameters equal to or greater than (>) 3.0 microns are non-respirable (1). According to the National Institute for Occupational Safety and Health (NIOSH), fibers with diameters > 3.5 um are non-respirable (2).

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The narrow, bending passages of the human respiratory system, do not permit the relatively larger, non –respirable fibers to enter the "deep" lung. Instead, they deposit on the surfaces of the upper respiratory tract, nose or pharynx. They are then cleared through normal physiological mechanisms.

As manufactured, continuous filament glass fibers are not respirable (>3.5 micrometers in diameter). Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacture or use may contain a very small amount of respirable particulate, some of which may be respirable fibers.

Mechanical processing may cause the filaments to fracture producing small pieces (fibers and particles) of the larger continuous filaments. There is no evidence that these fibers break longitudinally into smaller diameters. Upon breakage, the fibers may break horizontally into smaller lengths but not longitudinally into smaller diameters. As with sanding/grinding activity respirable and non-respirable particles may be generated.

Durability

The term "durability" refers to how long a fiber will remain in the lung. E-glass composition has been found to be durable in the human lung; however, if fibers are non-respirable their durability is unimportant.

Degree of exposure

The results in the terms of airborne concentrations of glass fibers and total dust would indicate that the workmen's exposure to these materials in negligible". (1)

Carcinogenicity

(Fiberglass, Continuous Filament) The International Agency for Research on Cancer (IARC) in june, 1987, categorized fibreglass continuous filament as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC with results being insufficient to classify fibreglass continuous filament as a possible, probable, or confirmed cancer causing material.

The ACGIH A4 classification, not classifiable as a human carcinogen, for respirable continuous filament glass fibers is based on inadequate data in terms of its carcinogenicity in humans and/or animals. For respirable continuous filament glass fibers, a TLV-TWA of 1 fiber/cc with an ACGIH A4 classification was adopted for non-respirable glass filament fiber, Measured as inhalable dust, to prevent mechanical irritation of the upper respiratory tract.

Continuous filament fibreglass is not listed in the National Toxicology Program (NTP) 7th Annual Report on Carcinogens, nor is it regulated by OSHA as a carcinogen.

12. ECOLOGICAL INFORMATION

Fiberglass is generally considered to be an inert solid waste, and no special precautions should be taken in case it is released or spilled. These products do not contain, nor are manufactured with, Class I or Class II Ozone-Depleting Chemicals (CFCs) identified in the Clean Air Act Amendment, 1990 list of Ozone Depleting Chemicals.

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13. DISPOSAL CONSIDERATIONS

Waste disposal method
Dispose solid waste in accordance with local, state and federal regulations. Not considered a hazardous waste under RCRA regulations. However, check for national and/or regional regulations, which may apply.

14. TRANSPORT INFORMATION

DOT information Not regulated.

Hazard class Not considered hazardous waste under federal "RCRA" regulations.

Proper shipping name Not regulated.

Labels required None.

Bill of lading description None.

UN/NA code None

15. REGULATORY INFORMATION

United States
EPA toxic Substances Control Act (TSCA): Fiberglass carries no Chemical Abstracts Index name, CAS registry number or EPA code designation number. Fiberglass is an "article" as defined in Section 710.2(f). It is exempt from Sections 5 and 8(b) reporting requirements. PPG considers these products exempt from EPA SARA Title III reporting requirements as they do not meet its health or physical hazards definitions nor contain any SARA 313 chemical ingredients in excess of EPA's de minimums concentrations.
OSHA Hazard Communication Standard: Subject to the applicable requirements of this regulation. Per this MSDS revision date, these fiberglass products are not known to contain chemical ingredients listed by the Pennsylvania, New Jersey or Massachusetts Right to now Law in excess of amount requiring reporting on such substances' MSDS or labels.

Canada
Exempt from Canadian Environmental Protection Act (CEPA) reporting on the Domestic Substances Lists as these products are considered "articles". Exempt from the Workplace Hazardous Materials Information System (WHMIS) labeling & MSDS for "controlled products" with fiberglass concentrations greater than 1.0%.

European economic committee (EEC) labeling classification
Fiberglass does not meet the classification for a "dangerous substance" according to 67/548/EEC and 97/69/EC. The E-glass composition has been incorporated in the EINECS under CAS number 65997-17-3 as a glass oxide.

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16. OTHER INFORMATION

HMIS and NFPA Hazard Rating:

Category	HMIS	NFPA
Acute Health	1	1
Flammability	1	1
Reactivity	0	0

NFPA Unusual Hazards: None

HMIS Personal Protection: To be supplied by user depending upon use.

Definitions:

29 CFR 1910.134 & 1926.103	:	OSHA Respiratory Protection Standards
29 CFR 1910.1200 & 1926.59	:	OSHA Hazard Communication
ACGIH	:	American Conference of Governmental Industrial Hygienists
ADR	:	Carriage of Dangerous Goods by Road (International Regulation)
CAA	:	Clean Air Act
CAS	:	Chemical Abstract Services
CERCLA	:	Comprehensive Environmental Response, Compensation Act
CFR	:	Code of Federal Regulations
DOT	:	Department of Transportation
DSL	:	Domestic Substances List (Canada)
EEC	:	European Economic Committee
EINECS	:	European Inventory of Existing Commercial Chemical Substances
EPA	:	Environmental Protection Agency
EU	:	European Union
HEPA	:	High Efficiency Particulate Air
HMIS	:	Hazardous Materials Information System
IARC	:	International Agency for Research on Cancer
IATA	:	International Air Transport association
IMDG	:	International Maritime Dangerous Goods Code
LC	:	Lethal Concentration
LD	:	Lethal Dose
NFPA	:	National Fire Protection Association

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NIOSH	:	National Institute for Occupational Safety and Health
NTP	:	National Toxicology Program
OSHA	:	Occupational Safety and Health Administration
PEL	:	Permissible Exposure Limit
PIN	:	Product Identification Number
PNOC	:	Particulates Not Otherwise Classified
PNOR	:	Particulates Not Otherwise Regulated
RCRA	:	Resource Conservation and Recovery Act
RID	:	Carriage of Dangerous Goods by Rail International Regulation
SARA	:	Superfund Amendments and Reauthorization Act
STEL	:	Short term Exposure Limit
TCLP	:	Toxic Chemical Leachate Programme
TDG	:	Transportation of Dangerous Goods

Definitions:

Title III emergency planning and community right to know act:
Section:

302	:	Extremely Hazardous Substances
303	:	Emergency Release
311	:	MSDS/List of Chemicals
312	:	Emergency and Hazardous Inventory
313	:	Toxic Chemicals Release Reporting
TLV	:	Threshold Limit Value
TSCA	:	Toxic Substance Control Act
TWA	:	Time Weighted Average
WHMIS	:	Workplace Hazardous materials Information System

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