THE GILL CORPORATION

Sandwich Panels Composed of Fiberglass Fabric-Reinforced Facing Skins Bonded to an Aluminium Honeycomb Core

Safety Data Sheet

according to Federal Register /
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Date of issue: 08/05/2015 Revision date: 07/19/2024 Supersedes: 02/17/2009

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : Sandwich Panels Composed of Fiberglass Fabric-Reinforced Facing Skins Bonded to an Aluminum Honeycomb Core

Other means of identification : Gillfloor® 5424
Gillfab® 5065
Gillfab® 5024D
Gillfab® 5024N
Gillfloor® 5424E

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : The panel is used for cargo flooring panels in freighter aircraft.

1.3. Details of the supplier of the safety data sheet

The Gill Corporation
4056 Easy Street
El Monte, CA 91731
(626) 443-4022
www.thegillcorp.com

1.4. Emergency telephone number

Emergency number : THE GILL CORPORATION: 1-626-443-4022 CHEMTREC: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Carc. 1B H350
Comb. Dust H232

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H232 - May form combustible dust concentrations in air
H350 - May cause cancer (Dermal, Inhalation, oral)

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing dust, fume, spray
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear face protection, protective gloves
P308 + P313 - If exposed or concerned: Get medical advice/attention
P405 - Store locked up
P501 - Dispose of contents/container to comply with local/regional/national/international regulations

2.3. Other hazards

Other hazards not contributing to the classification : As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or smelting. Other constituents in this product are considered nuisance particles or dust. Exposure to dusts or powders may cause mechanical irritation of the respiratory system, eyes, and skin. This product contains trace amounts of Antimony Compounds.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Fiberglass	(CAS No) 65997-17-3	35 - 50	Carc. 1B, H350
Aluminum	(CAS No) 7429-90-5	24 - 40	Not classified
Cured Epoxy Adhesive	(CAS No) Proprietary	10 - 17	Comb. Dust, H232
Co-cured epoxy resin/synthetic elastomer	(CAS No) Proprietary	10 - 16	Not classified
Antimony pentoxide	(CAS No) 1314-60-9	3-5	Not classified

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

First-aid measures after skin contact : Remove contaminated clothing. Rinse immediately with large amounts of water. If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention. Obtain medical attention if irritation persists. DO NOT rub or scratch irritated area. If fiberglass becomes imbedded, seek medical attention.

First-aid measures after eye contact : Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get Immediate Medical Attention.

First-aid measures after ingestion : Not expected to be an important route of entry into the body. If large amounts of particulate matter are ingested, it may cause gastrointestinal distress. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : As packaged, this material does not present significant health hazards. The hazards below apply to the product if aerosols or dusts are generated from cutting, grinding, or smelting. Oxides from metallic fires are a severe health hazard. Inhalation or contact with substance or decomposition product may cause severe injury or death.

Symptoms/injuries after inhalation : Inhalation of aluminum powder may cause lung effects. Inhalation of metallic dust may be hazardous. Dust and fumes produced during processing should be treated as a dust hazard. This product contains aluminum, which can cause pulmonary fibrosis and lung damage if inhaled as a fine powder, and is complicated by silica and iron oxide dust. Aluminum may also be implicated in Alzheimer's disease. Product will act as a nuisance dust. Inhalation of high concentrations of dust may cause coughing and mild, transitory respiratory irritation.

Symptoms/injuries after skin contact : Dusts and particulate matter may cause irritation of the skin.

Symptoms/injuries after eye contact : Dusts and particulate matter may cause irritation of the eyes.

Symptoms/injuries after ingestion : Not expected to be an important route of entry into the body. Ingestion of large quantities of the product may cause gastric discomfort or distress.

Chronic symptoms : Persons with a history of chronic lung diseases may be at increased risk from exposure to excessive levels of nuisance dust. Persons with medical conditions generally aggravated by mechanical irritants in the air or on the skin may be at increased risk for a worsening of the underlying condition if exposed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Any. Use media appropriate for surrounding fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Product will not burn.

Explosion hazard : Aluminum dust is readily ignitable and explosive when suspended in air. In case of fire: Use extreme care to prevent dust cloud formation. Can decompose in a fire emitting toxic fumes and gases of carbon dioxide, carbon monoxide, hydrogen cyanide, antimony oxides, hydrogen bromide, oxides of nitrogen; other toxic and irritating gases can be produced depending on condition of combustion.

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Firefighters should wear a NIOSH approved full-face piece self-contained breathing apparatus (SCBA) operated in positive pressure mode and full turnout or bunker gear.

Special protective equipment for fire fighters : Wear full bunker gear including a positive pressure self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : May react violently or explosively on contact with water. Dousing metallic fires with water will generate hydrogen gas, an extremely dangerous explosion hazard,
particularly if fire is in a confined environment (i.e., building, cargo hold, etc.).Containers may explode when heated. May re-ignite after fire is extinguished.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Ventilate area. Keep unauthorized personnel away.

6.2. Environmental precautions

Any wastes generated during cleanup operations should be evaluated with respect to hazardous and solid waste regulations and disposed of in a properly permitted facility in accordance with all local, state, and federal regulations.

6.3. Methods and material for containment and cleaning up

For containment : Move containers from fire area if you can do it without risk. DO NOT USE WATER, FOAM OR CO2. Confining and smothering metal fires is preferable rather than applying water. If impossible to extinguish, protect surroundings and allow fire to burn it out. Do not walk through any dust resulting from damage to product. Prevent entry into waterways, sewers, basements or confined areas. Stop leak if you can do it without risk.

Methods for cleaning up : HEPA Vacuum or wet methods and place in a disposal container.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Use methods to minimize dust. Do not breathe dust. DO NOT use compressed air or dry sweeping to remove dust from work area. Use a vacuum with adequate filtration system to remove dusts. If an appropriate vacuum is unavailable, only wet-clean-up methods should be used (i.e. misting). Moisture should be added as necessary to reduce exposure to airborne respirable dust.

Hygiene measures : Practice good housekeeping. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in tightly closed containers out of contact with the elements.

Incompatible products : Strong acids. Reducing agents.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sandwich Panels Composed of Fiberglass Fabric-Reinforced Facing Skins Bonded to An Aluminum Honeycomb Core	
ACGIH	Not applicable
OSHA	Not applicable

Aluminum (7429-90-5)		
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (respirable fraction)
ACGIH	Remark (ACGIH)	Pneumoconiosis; LRT irr
OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³ (respirable particulate)
OSHA	Remark (US OSHA)	15 mg/m³ (total dust)

Fiberglass (65997-17-3)		
ACGIH	Not applicable	
OSHA	OSHA PEL (TWA) (mg/m³)	3 fibers/cm³ (fibers with diameter ≤ 3.5 µm & length ≥ 10 µm); 5 mg/m3 TWA (total fibrous glass)

Cured Epoxy Adhesive (Proprietary) Particulates Not Otherwise Regulated	
ACGIH	Not applicable
OSHA	Not applicable

Co-cured epoxy resin/synthetic elastomer (Proprietary)	
ACGIH	Not applicable
OSHA	Not applicable

Antimony pentoxide (1314-60-9)		
ACGIH	ACGIH TWA (mg/m^3)	0.5 mg/m³
OSHA	OSHA PEL (TWA) (mg/m³)	0.5 mg/m³ resp dust

Particulates Not Otherwise Regulated (Total Dust)		
ACGIH	ACGIH TWA (mg/m³)	3 mg/m^3 Respirable; 10 mg/m^3 Total dust
OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m^3 Respirable; 15 mg/m^3 Total dust

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Enclosed processes used in combination with local exhaust ventilation as necessary to control air contaminants at or below acceptable exposure guidelines. Collection systems must be designed and maintained to prevent the accumulation and recirculation of respirable silica into the workplace.

Personal protective equipment : An Appropriate apron or other body covering, see above, is recommended where there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

Eye protection : Where eye contact is possible with particulate matter, safety glasses with side shields are recommended.

Skin and body protection : Wear gloves impermeable to glass fibers. Wear loose fitting, long sleeved clothing and long pants.

Respiratory protection : If dusts or particulates are generated during handling or processing and exposures may exceed the limits cited above, use, as a minimum, a NIOSH approved ½ face piece respirator with cartridges approved for particulate matter with an exposure limit of not less than 0.05 mg/M3. . Respiratory protection is not normally required. If appreciable dusts and/or particulate matter are generated during handling or processing, the operation should be evaluated by a professional industrial hygienist to determine the need for respiratory protection. If respiratory protection is deemed necessary, use, as a minimum, a respirator with NIOSH approvals for particulate matter. All provisions of OSHA's Respiratory Protection Standard (29 CFR 1910.134) should be followed.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Sandwich panel.

Color : Grayish in Color

Odor : Odorless to slight aromatic odor

Odor threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	0.2-0.5g/cc
Solubility	:	Unknown.
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Product is stable. Hazardous polymerization will not occur.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Aluminum dust may generate hydrogen and heat when exposed to water. Water/aluminum powder mixture may be especially hazardous when confined and may react violently with strong oxidizers and many halogenated hydrocarbons.

10.5. Incompatible materials

Strong oxidizing agents, strong acids and bases, especially oxalic and hydrofluoric acid and acyl halides.

10.6. Hazardous decomposition products

Decomposition and combustion products maybe toxic. Can decompose in a fire emitting toxic fumes and gases of carbon dioxide, carbon monoxide, hydrogen cyanide, antimony oxides, hydrogen bromide; oxides of nitrogen and other toxic and irritating gases can be produced depending on condition of combustion.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Flame retardant	
LD50 oral rat	> 2000 mg/kg

Co-cured epoxy resin/synthetic elastomer	
LD50 oral rat	≤ 2000 ml/kg

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitization	:	Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer (Dermal, Inhalation, oral).

Fiberglass (65997-17-3)	
IARC group	3 - Not classifiable
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : Inhalation of aluminum powder may cause lung effects. Inhalation of metallic dust may be hazardous. Dust and fumes produced during processing should be treated as a dust hazard. This product contains aluminum, which can cause pulmonary fibrosis and lung damage if inhaled as a fine powder, and is complicated by silica and iron oxide dust. Aluminum may also be implicated in Alzheimer's disease. Product will act as a nuisance dust. Inhalation of high concentrations of dust may cause coughing and mild, transitory respiratory irritation.

Symptoms/injuries after skin contact : Dusts and particulate matter may cause irritation of the skin.

Symptoms/injuries after eye contact : Dusts and particulate matter may cause irritation of the eyes.

Symptoms/injuries after ingestion : Not expected to be an important route of entry into the body. Ingestion of large quantities of the product may cause gastric discomfort or distress.

Chronic symptoms : Persons with a history of chronic lung diseases may be at increased risk from exposure to excessive levels of nuisance dust. Persons with medical conditions generally aggravated by mechanical irritants in the air or on the skin may be at increased risk for a worsening of the underlying condition if exposed.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bio accumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : If material as supplied becomes a waste, incinerate or landfill in accordance with local, state, and federal laws and regulations. Incinerate only if incinerator is operated at high temperature and is capable of scrubbing out acidic combustion products. Contact your local or state environmental agency for specific rules.

Additional information : Empty containers will contain product residues. Observe proper safety and handling precautions. Do not allow empty containers to be used for any purpose except to store and ship original product.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Sandwich Panels Composed of Fiberglass Fabric-Reinforced Facing Skins Bonded to An Aluminum Honeycomb Core
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory except for:

Cured Epoxy Adhesive	CAS No Proprietary	C>=10.00% ; C<=17.00%
Co-cured epoxy resin/synthetic elastomer	CAS No Proprietary	C>=10.00% ; C<=16.00%

Aluminum (7429-90-5)
Listed on United States SARA Section 313

Antimony pentoxide (1314-60-9)
Listed on United States SARA Section 313

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity

Fiberglass (65997-17-3)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

Aluminum (7429-90-5)
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

Antimony pentoxide (as Antimony) (1314-60-9)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - New York - Right to Know Hazardous Substances List U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date : 07/19/2024

Data sources : ChemADVISOR, Inc.: https://www.chemadvisor.com
GESTIS DNEL Database: https://www.dguv.de/ifa/gestis/gestis-dnel-liste/index-2.jsp

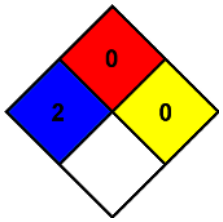
Full text of H-phrases:

Carc. 1B	Carcinogenicity Category 1B
Comb. Dust	Combustible Dust
H232	May form combustible dust concentrations in air
H350	May cause cancer

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : * - Chronic Hazard - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 0 - Minimal Hazard

Physical : 0 - Minimal Hazard

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product