

**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 Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid honeycomb core  
Other means of identification : 4709, 4009

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

Use of the substance/mixture : Light weight, high strength panels designed for use as flooring in passenger compartments of commercial aircraft where weight, durability and strength are a major consideration.

**1.3. Details of the supplier of the safety data sheet**

The Gill Corporation  
4056 Easy Street  
El Monte, CA 91731  
[www.thegillcorp.com](http://www.thegillcorp.com)

**1.4. Emergency telephone number**

Emergency number : CHEMTREC: 1-800-424-9300

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification (GHS-US)**

Comb. Dust H232  
Eye Dam. 1 H318  
Skin Sens. 1 H317  
Carc. 1B H350  
Repr. 2 H361

Full text of H-phrases: see section 16

**2.2. Label elements****GHS-US labeling**

Hazard pictograms (GHS-US) :



GHS05



GHS07



GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H232 - May form combustible dust concentrations in air  
H317 - May cause an allergic skin reaction  
H318 - Causes serious eye damage  
H350 - May cause cancer (Dermal, Inhalation, oral)  
H361 - Suspected of damaging fertility or the unborn child

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  
P302 + P352 - If on skin: Wash with plenty of water, foam, carbon dioxide (CO<sub>2</sub>), dry extinguishing powder  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308 + P313 - If exposed or concerned: Get medical advice/attention  
P310 - Immediately call a doctor  
P321 - Specific treatment (See Section four (4) of this document on this label)  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
P362+P364 - Take off contaminated clothing and wash it before reuse

# Sandwich Panels Composed of Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid Honeycomb Core

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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, Organic -chrome complex and Inorganic Arsenic.

### 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)
Carbon	(CAS No) 7440-44-0	22 - 40	Comb. Dust, H232
Cured Phenolic Resin(s)	(CAS No) Proprietary	10 - 33	Not classified
Nomex Paper	(CAS No) 25765-47-3	10 - 20	Not classified
Co-cured epoxy resin/synthetic elastomer	(CAS No) Proprietary	12 - 20	Not classified
Cured Epoxy Adhesive	(CAS No) Proprietary	8 - 18	Comb. Dust, H232
Fiberglass	(CAS No) 65997-17-3	0 - 10	Carc. 1B, H350
Fire retardant ( containing phenol)	(CAS No) Proprietary	4 - 8.5	Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361 STOT SE 3, H335

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 pulverizing.

Symptoms/injuries after inhalation : Inhalation of dust may result in itching and upper respiratory tract 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. Mechanical irritation, potentially severe, can result from eye contact with this material.

Symptoms/injuries after ingestion : May cause toxic effects if inhaled or ingested/swallowed.

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.

# Sandwich Panels Composed of Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid Honeycomb Core

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 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 : 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

Firefighting instructions : Evacuate area.

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.

Other information : If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Avoid breathing dust.

#### 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 : Do not walk through any dust resulting from damage to product. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up : Pick up product and return to original packaging if reusable. If not reusable, place in appropriate containers for disposal. 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.

### 6.4. 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.

# Sandwich Panels Composed of Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid Honeycomb Core

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Sandwich Panels Composed of Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid honeycomb core		
ACGIH	Not applicable	
OSHA	Not applicable	

Fiberglass (65997-17-3)		
ACGIH	Not applicable	
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	3 fibers/cm <sup>3</sup> (fibers with diameter ≤ 3.5 μm & length ≥ 10 μm); 5 mg/m <sup>3</sup> TWA (total fibrous Fiberglass)

Carbon (7440-44-0)		
ACGIH	TLV	10 mg/m <sup>3</sup> resp dust
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> total dust 5mg/m <sup>3</sup> resp dust

Nomex Paper (25765-47-3)		
ACGIH	Not applicable	
OSHA	Not applicable	

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

Cured Phenolic Resin(s) (Proprietary) Particulates Not Otherwise Regulated		
ACGIH	Not applicable	
OSHA	Not applicable	

Fire retardant ( containing phenol) (Proprietary)		
ACGIH	TLV	5 mg/m <sup>3</sup> resp dust
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> resp dust

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

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

### 8.2. Exposure controls

Appropriate engineering controls	:	General ventilation. Local exhaust and enclosed processes may be necessary for processes which generate large quantities of airborne dust.
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 Fiberglass fibers. Wear loose fitting, long sleeved clothing and long pants.

# Sandwich Panels Composed of Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid Honeycomb Core

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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 : Black  
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

No additional information available

### 10.5. Incompatible materials

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

# Sandwich Panels Composed of Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid Honeycomb Core

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 10.6. Hazardous decomposition products

Decomposition and combustion products may be 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

#### Carbon (7440-44-0)

LD50 oral rat	> 5 mg/kg Gekkan Yakuji. Pharmaceuticals Monthly. Vol. 34, Pg. 416, 1992.
---------------	---

#### Cured Phenolic Resin(s) (Proprietary)

LD50 oral rat	> 5000 mg/kg	National Technical Information Service. Vol. OTS0556084
LD50 dermal rat	> 2000 mg/kg	National Technical Information Service. Vol. OTS0556084

#### Co-cured epoxy resin/synthetic elastomer (Proprietary)

LD50 oral rat	≤ 2000 ml/kg
---------------	--------------

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes serious eye damage.  
Respiratory or skin sensitization : May cause an allergic skin reaction.  
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 : Suspected of damaging fertility or the unborn child.  
Specific target organ toxicity (single exposure) : Not classified  
Specific target organ toxicity (repeated exposure) : Not classified  
Aspiration hazard : Not classified  
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 pulverizing.  
Symptoms/injuries after inhalation : Inhalation of dust may result in itching and upper respiratory tract 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. Mechanical irritation, potentially severe, can result from eye contact with this material.  
Symptoms/injuries after ingestion : May cause toxic effects if inhaled or ingested/swallowed.  
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

# Sandwich Panels Composed of Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid Honeycomb Core

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 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 : Dispose in a safe manner in accordance with local/national regulations.  
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 Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid 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:

Nomex Paper	CAS No 25765-47-3	C>=10.00% ; C<=20.00%
Cured Epoxy Adhesive	CAS No Proprietary	C>=8.00% ; C<=18.00%
Cured Phenolic Resin(s)	CAS No Proprietary	C>=10.00% ; C<=33.00%
Fire retardant ( containing phenol)	CAS No	C>=4.00% ; C<=8.50%
Co-cured epoxy resin/synthetic elastomer R0429	CAS No	C>=12.00% ; C<=20.00%

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de Minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

### 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

# Sandwich Panels Composed of Carbon Fiber Reinforced Epoxy Facing Skins Bonded to a Nomex Aramid Honeycomb Core

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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	

### SECTION 16: Other information

Revision date : 09/17/2015

Data sources : ChemADVISOR, Inc.[<https://www.chemadvisor.com>]. ChemIDplus [<http://chem.sis.nlm.nih.gov/chemidplus/rn/116094-23-6>]. GESTIS DNEL Database [[http://dnel-en.itrust.de/nxt/gateway.dll/dnel\\_en/000000.xml?f=templates\\$fn=default.htm\\$vid=dneleng:ddb eng\\$3.0/](http://dnel-en.itrust.de/nxt/gateway.dll/dnel_en/000000.xml?f=templates$fn=default.htm$vid=dneleng:ddb eng$3.0/)]. [http://gestis-en.itrust.de/nxt/gateway.dll/gestis\\_en/000000.xml?f=templates\\$fn=default.htm\\$3.0](http://gestis-en.itrust.de/nxt/gateway.dll/gestis_en/000000.xml?f=templates$fn=default.htm$3.0); PubChem - phenoxarsine oxide <https://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=6017>; ToxNet - PHENARSAZINE OXIDE <http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?/.temp/~jpbTjo:2; 29 CFR 1910.1000 – OSHA Annotated Table Z-1>.

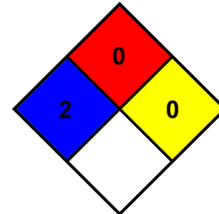
Full text of H-phrases:

Carc. 1B	Carcinogenicity Category 1B
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Repr. 2	Reproductive toxicity Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H232	May form combustible dust concentrations in air
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H335	May cause respiratory irritation
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child

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 : 3 - Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

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*