



## 1. PRODUCT IDENTIFICATION

### ALUMINUM SKINS / Balsa CORE PANEL

- Gillfab™ 5040 Panel(-L, -Q, -X)
- 5042 (-L, -Q, -X, -Y)
- 5042A, 5042B, 5042C

## 2. COMPOSITION - INFORMATION ON INGREDIENTS

Chemical ingredients (% by wt.)

| COMPONENT   | CAS         | %        |
|---|-------------|----------|
| Aluminum  | 7429-90-5   | 30 - 90  |
| Magnesium   | 1309-48-4   | < 3      |
| Manganese   | 7439-96-5   | < 1.5    |
| Chromium  | 7440-47-3   | < 0.35   |
| Balsa wood core (ochroma lagopus)                     | N.A.        | 5 – 60   |
| Proprietary Adhesive                                  | Proprietary | 0.5 - 20 |
| Zinc Oxide (in Gillfab 5040 & 5042A only)             | 1314-13-2   | < 2.8    |
| Flame Retardant (in Gillfab 5042, 5042B & 5042C only) | Proprietary | < 2.0    |

## OSHA REGULATORY STATUS

As shipped this material is an inert aluminum skin panel with a balsa core in which the adhesive reinforcement has been cured using a thermoset process. While this material is not classified as hazardous under OSHA regulations, this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of the product.

## 3. HAZARDS IDENTIFICATION

Flat, aluminum skin panels. Heat may cause flammable hazardous decomposition products, which may form toxic materials such as carbon dioxide, carbon monoxide, various low molecular weight hydrocarbons, oxides of nitrogen, hydrogen cyanide, oxides of zinc, metal oxides and other toxic gases, acrid smoke and fumes. Flammable gases and vapors may also be produced during thermal decomposition. Decomposition can be hazardous and uncontrollable.

## POTENTIAL HEALTH EFFECTS

- EYE:** Dusts may cause irritation or scratch the surface of the eye. Can cause redness, tearing, blurred vision, and pain.
- SKIN:** Skin contact with dust of this product may produce itching and transient mechanical irritation. Skin irritation is worse when the surface of the skin is moist, as found with perspiration.
- INGESTION:** Ingestion is not recommended and not expected to be a route of exposure. If ingestion occurs, treat symptomatically.
- INHALATION:** Inhalation of dust may result in itching and upper respiratory tract irritation. Inhalation is considered the primary route of occupational exposure.



## CHRONIC EFFECTS/ CARCINOGENICITY

Gillfab 5040 and 5042A contain less than 2.8% zinc oxide. Respiratory protection should be worn when cutting or altering this product to avoid dust inhalation. Cutting or alteration of the product should only be performed in a well-ventilated area.

Gillfab 5042, 5042B, and 5042C contain less than 2% of a proprietary brominated flame retardant. The primary route of exposure to humans is through inhalation. Inhalation of air concentration levels above the PNOR may cause irritation and adverse lung effects. Animal toxicity studies indicate that when the brominated fire retardant was administered orally, animal exposures resulted in liver, thyroid, and kidney effects and a potential for developmental effects. This substance is not listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

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. The oral LD50 = NIF; LC50 = NIF. Release of this material as aluminum dust may occur in trace quantities during processing of the product, but is not expected to present a significant hazard.

There are no hazardous components in this material as received, however, cutting, milling, drilling, routing or otherwise fabricating this material may produce the following: particles - not otherwise regulated, total dust. Release of this material during processing as respirable and non-respirable dust should be controlled by adequate local exhaust ventilation, good work practices, and use of personal protective equipment as needed.

The chronic effect of the general product is not known.

## MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

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.

## POTENTIAL ENVIRONMENTAL EFFECTS

This product as shipped is inert and should pose no significant hazard to the environment.

## 4. FIRST AID MEASURES

|                    |   |
|--------------------|---|
| <b>EYE:</b>        | Flush with water for 15 minutes. Seek medical attention if irritation persists. Eye contact with dust may produce mechanical irritation.  |
| <b>SKIN:</b>       | Wash exposed area with soap and water. DO NOT rub or scratch irritated area. Skin contact with dust of this product may produce itching and transient mechanical irritation.  |
| <b>INGESTION:</b>  | Avoid ingestion. Treat symptomatically. If swallowed do not induce vomiting. Keep person warm, quiet and get medical attention. Aspiration of the material into the lungs due to vomiting can cause chemical pneumonitis, which can be fatal. |
| <b>INHALATION:</b> | Move individual to fresh air. If breathing is difficult administer oxygen. Seek medical attention if irritation persists. Inhalation of dust may result in itching and upper respiratory tract irritation.                                    |

## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES

**FLASH POINT:** Not known

**FLAMMABLE LIMITS** LFL: Not applicable

UFL: Not applicable

**EXTINGUISHING MEDIA:** Use a Class D fire extinguisher. Do not use Class A, B, or C fire extinguishers such as water or halogenated materials.

**FIRE AND EXPLOSION HAZARDS:** Can decompose in a fire emitting toxic fumes and gases such as carbon dioxide, carbon monoxide, various low molecular weight hydrocarbons, oxides of nitrogen, hydrogen cyanide, oxides of zinc, metal oxides and other toxic gases, acrid smoke and fumes.

**FIRE FIGHTING EQUIPMENT:** Wear full bunker gear including self contained breathing apparatus in sustained fire.



## 6. ACCIDENTAL RELEASE MEASURES

Avoid generating excess dust. HEPA vacuum or wet wipe dusts and place in a disposable container. It is your duty to dispose of the chemical materials and/or their containers in accordance with the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act and all state and local laws/ regulations regarding disposal.

## 7. HANDLING AND STORAGE

When handling, wear a long-sleeve shirt, rubber gloves and chemical safety goggles. Avoid contact with eyes. Wear proper respiratory protection where potential exposure to dust may occur (approved by NIOSH/ MSHA). Avoid breathing dust. Minimize dust generation and accumulation. Store indoors in dry, well-ventilated area to protect material. DO NOT store in unlabeled or mislabeled containers

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### ENGINEERING CONTROLS:

Provide efficient mechanical (general/local exhaust) ventilation to maintain exposure below TLV(s). Minimize dust generation and accumulation.

### RESPIRATORY PROTECTION:

Where dust is generated use a NIOSH approved half and full face air purifying respirator with dust/mist filter cartridges. Use in accordance with OSHA regulations under 29 CFR 1910.134

### SKIN PROTECTION:

Wear gloves to protect against sharp edges. Wear loose fitting, long sleeved clothing and long pants.

### EYE PROTECTION:

If dust is generated, wearing chemical goggles in compliance with OSHA regulations is advised. However, OSHA regulations also permit other type safety glasses (consult your safety equipment supplier), or wear full-face respirator with dust/mist filter cartridges.

### GENERAL HYGIENE CONSIDERATIONS:

The health hazards associated with this material, when used as recommended, are mechanical skin, eye, and respiratory irritation associated with the generation of fiberglass composite dusts during machining or cutting. The following general hygiene considerations are recognized as common, good industrial hygiene practices:

- Wash hands after use and before eating
- Shower at the end of the workday. Wash work clothes separately and wipe out washer at the end of the cycle.
- Avoid breathing dust
- Wear safety goggles

## EXPOSURE GUIDELINES

There are no hazardous components in this material as received, however, cutting, milling, drilling, routing, or otherwise fabricating this material may produce dust which can contain the following:

| COMPONENT  | OSHA PEL TWA   | ACGIH TLV   |
|--|--|---|
| Zinc oxide (in Gillfab 5040 & 5042A)                           | Total dust 10 mg/m <sup>3</sup><br>Respirable 5 mg/m <sup>3</sup>                              | Total dust 10 mg/m <sup>3</sup><br>Respirable 10 mg/m <sup>3</sup>      |
| Balsa wood (ochroma lagopus)                                   | Total dust 15 mg/m <sup>3</sup><br>Respirable 5 mg/m <sup>3</sup>                              | 1.0 mg/m <sup>3</sup>   |
| Brominated Flame Retardant<br>(in Gillfab 5042, 5042B & 5042C) | Resp dust 5 mg/m <sup>3</sup>  | Resp dust 3 mg/m <sup>3</sup>   |
| Aluminum   | 15 mg/m <sup>3</sup> , metal, total dust<br>5 mg/m <sup>3</sup> , metal, respirable<br>(as Al) | 10 mg/m <sup>3</sup> , metal dust<br>5 mg/m <sup>3</sup> , welding fume |



## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |                      |
|---|----------------------|
| <b>APPEARANCE:</b>                          | Flat metallic panels |
| <b>ODOR:</b>                                | No odor              |
| <b>BOILING POINT:</b>                       | N/A                  |
| <b>VAPOR PRESSURE</b>                       | N/A                  |
| <b>SOLUBILITY IN WATER:</b>                 | None                 |
| <b>SPECIFIC GRAVITY (H<sub>2</sub>O=1):</b> | 0.2 – 0.8 g/cc       |
| <b>pH:</b>                                  | N/A                  |
| <b>UEL:</b>                                 | N/A                  |
| <b>LEL:</b>                                 | N/A                  |

## 10. STABILITY AND REACTIVITY

|  |   |
|--|---|
| <b>STABILITY:</b>                        | Stable  |
| <b>MATERIALS TO AVOID:</b>               | Avoid contact with strong oxidizing agents, strong acids and bases, especially oxalic and hydrofluoric acid and acyl halides.   |
| <b>HAZARDOUS POLYMERIZATION:</b>         | Will not occur  |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS:</b> | Can decompose in a fire emitting toxic fumes and gases such as carbon dioxide, carbon monoxide, various low molecular weight hydrocarbons, oxides of nitrogen, hydrogen cyanide, oxides of zinc, metal oxides and other toxic gases, acrid smoke and fumes. |

## 11. TOXICOLOGICAL INFORMATION

For the detailed toxicological information on the components of this material, contact the address listed in Section 1 of this MSDS

## 12. ECOLOGICAL INFORMATION

None found

## 13. DISPOSABLE CONSIDERATIONS

If material as supplied becomes a waste, landfill in accordance with local, state, and federal laws and regulations. Contact your local or state environmental agency for specific rules.

## 14. TRANSPORT INFORMATION

|              |               |
|--------------|---------------|
| <b>DOT:</b>  | Not Regulated |
| <b>IMO:</b>  | Not Regulated |
| <b>IATA:</b> | Not Regulated |

## 15. REGULATORY INFORMATION

### **INVENTORY STATUS – Zinc Oxide (in Gillfab 5040 & 5042A), Proprietary Brominated Fire Retardant (in Gillfab 5042, 5042B & 5042C)**

| <u>Inventory</u>        | <u>Status</u> |
|-------------------------|---------------|
| United States (TSCA)    | Listed        |
| European Union (EINECS) | Listed        |
| Canada (DSL)            | Listed        |

**CERCLA/ SUPERFUND, 40 CFR 117.302:** This material contains Reportable Quantity (RQ) Substances: Zinc oxide.



**SARA HAZARD CATEGORY:** This material has been reviewed according to the EPA Hazard Categories promulgated under Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered to meet the following categories: none.

**SARA 313 INFORMATION:** This material contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372: zinc oxide (in 5040 and 5042A).

**CALIFORNIA PROPOSITION 65:** The following statement is made in compliance with the California Safe Drinking and Toxic Enforcement Act of 1986:

Substances known to the State of California to cause cancer, birth defects or other reproductive harm: zinc oxide (in 5040 and 5042A)

## 16. OTHER INFORMATION

**MSDS STATUS:** Revised all sections re: ANSI Z400.1-1998 format  
**MSDS PREPARED FOR:** **M.C. Gill Corporation**  
**4/21/05**  
**MSDS PREPARED BY:** MC Gill Corporation: 1/27/05

The information contained herein is believed to be correct. However, no guarantee or warranty of any kind is made with respect to this information.

M.C. Gill Corporation provides this information as a customer service. While the information contained in this MSDS is believed to be correct, no guarantee or warranty of any kind is made with respect to this information.

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