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 208 Avenida Fabricante
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Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name GlueFOIL
Item Number GFA, GFC, GFS, BL, RD, GR, PK, GD, BK
Generic Name Metal Foil Laminated with Heat Activated Adhesive

MFG Location 208 Avenida Fabricante, San Clemente, CA 92672, United States

2. COMPOSITION / INFORMATION ON INGREDIENTS

Material Name Metal Foil Laminated with Heat Activated Adhesive, Concentration 100%

Laminated Adhesive

Material	CAS No.	OSHA PEL	ACGIH TLV
Paraffin	64742-26-3	2mg/m ³ (TWA)	2mg/m ³ (TWA)
Vax012 Resin	108-05-4	15mg/m ³ (TWA) total dust, 5mg/m ³ dust (particulates)	35mg/m ³ (8hr, TWA, A3)
Tackifier Rosin	8050-31-5	TWA 10mg/m ³ total particulates	TWA 10mg/m ³ total particulates

GlueFOIL Using Natural Aluminum Alloy or Color Aluminum Alloy Substrate

Material	CAS No.	% by weight	OSHA PEL	ACGIH TLV
Aluminum	7429-90-5	81 - 99	15mg/m ³	10mg/m ³
Copper	7440-50-8	0.1 - 4.7	1mg/m ³ (dust & mists)	1mg/m ³ (dust & mists)
Silicon	7440-21-3	1 - 13.5	15mg/m ³	10mg/m ³
Magnesium	7439-95-4	1 - 5	None established	None established
Manganese	7439-96-5	1 - 2	5mg/m ³ (ceiling)	0.2mg/m ³
Iron	7439-89-6	0.1 - 1.3	None established	None established
Nickel	7440-02-0	1 - 5	1mg/m ³	1mg/m ³ (inhalable)

GlueFOIL Using Natural Copper Alloy Substrate

Material	CAS No.	% by weight	OSHA PEL	ACGIH TLV
Copper	7440-50-8	99.75 - 100	1mg/m ³ (dust & mists)	1mg/m ³ (dust & mists)

GlueFOIL Using Natural Stainless Steel Alloy Substrate

Material	CAS No.	% by weight	OSHA PEL	ACGIH TLV
Iron	7439-89-6	52 - 78	10mg/m ³ , Iron Oxide	5mg/m ³ , Iron Oxide
Chromium	7440-47-3	12 - 24	1mg/m ³ , Metal	0.5mg/m ³ , Metal
Nickel	7440-02-0	6 - 19	1mg/m ³ , Metal	1.5mg/m ³ , Metal
Molybdenum	7439-98-7	0 - 0.5	5mg/m ³ , soluble MO	5mg/m ³ , soluble MO
Silicon	7440-21-3	0 - 6	15mg/m ³ , total dust	10mg/m ³ , total dust
Manganese	7439-96-5	0 - 2	5mg/m ³ (ceiling)	0.2mg/m ³
Tungsten	7440-33-7	0 - 1.8	15mg/m ³ , total dust	1mg/m ³ (as W)
Aluminum	7429-90-5	0 - 1.5	15mg/m ³ , total dust	10mg/m ³ , total dust
Columbium	7440-03-1	0 - 1.0	15mg/m ³ , total dust	10mg/m ³ , total dust
Titanium	7440-32-6	0 - 0.7	15mg/m ³ , total dust	10mg/m ³ , total dust
Copper	7440-50-8	0 - 0.75	1mg/m ³ (dust & mists)	1mg/m ³ (dust & mists)
Cobalt	7440-48-4	0 - 1	0.1mg/m ³ (dust & mists)	0.02mg/m ³

3. HAZARD IDENTIFICATION / INFORMATION

Physical Hazards

Ethylene vinyl acetate based adhesive will melt if subjected to temperatures in excess of 160°F / 71°C. Combustion may occur at temperatures above 460°F / 238°C. Aluminum, copper and stainless steel foils are thin and sharp at edges. Combustion is not applicable to metal foil substrates.

Physical Form

Adhesive is solid form up to 160°F / 71°C, adhesive will change to liquid phase above this temperature. Metal foil substrate will remain a solid sheet form above temperature of 160°F / 71°C

Appearance

Natural aluminum, copper, stainless steel or metallic blue, red, green, pink, gold, black depending on user selection

Odor

None

OHSA Hazard Classification

Finished dry-to-the-touch laminated metallic foil sheet is not hazardous

Department of Transportation (DOT) Hazard Class

This product is not subject to DOT regulations

NFPA Hazard Class (HMIS Ratings)

Health	0
Flammability	1
Reactivity	0

24 Hour General Emergency Telephone Numbers

For spill, fire or accidents contact:

Chemtrec

North America Phone: 1-800-424-9300

International Phone: 703-527-3887

For general health emergencies contact:

Orange County Poison Control Center

Phone: 1-800-544-4404

4. HEALTH EFFECTS DATA

EYE

Fumes from overheated adhesive film may cause watering. Prolonged exposure could cause irritation.

SKIN

No irritation observed. Contact with heated melted adhesive or heated metal foil may cause burns.

INHALATION

Laminated metal foil sheet is not respirable as marketed. At temperatures above 160°F / 71°C, fumes may be irritating to the throat.

INGESTION

Do not take internally. Not an ingestion hazard under anticipated conditions of use.

5. FIRST AID MEASURES

EYE

Flush with lukewarm water. Obtain medical attention if irritation persists

SKIN

If cuts are incurred during handling, use standard first aid for cuts/scratches. For contact with molten adhesive material or heated metal foil, cool skin with water and cold packs for 15 minutes.

INHALATION

If respiratory symptoms develop from exposure to fumes emitted by molten adhesive material, move away from source of exposure and into fresh air. If symptoms persist, seek medical attention.

INGESTION

If molten material or foil is swallowed, seek immediate medical attention.

6. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical, foam, sand or earth is recommended

FIREFIGHTING INSTRUCTIONS

Emergency responders in the danger area should wear bunker gear and self contained breathing devices

HAZARDOUS COMBUSTION PRODUCTS

If heated to combustion, the following substances may be formed: carbon dioxide, carbon monoxide, oxides, sulfur and nitrogen

ADHESIVE FLASH POINT

460°F / 238°C

METAL FOIL FLASH POINT

Not Applicable

OSHA Flammability Class

Not Applicable

7. SPILL AND LEAK PROCEDURES

SPILL, LEAK OR RELEASE

Pick up film to prevent slipping hazard

AQUATIC TOXICITY

Adhesive laminated metal foil is insoluble in water

WASTE DISPOSAL

Landfilling in a permitted solid or hazardous waste facility is recommended. Dispose in container or heavy plastic bag. Ensure there are no restrictions on disposing bulk or semi-bulk quantities of waste material. Disposal should be in accordance with all Federal, State and Local regulations.

8. HANDLING AND STORAGE

STORAGE TEMPERATURE

Maximum Recommended Storage Temperature: 95°F / 35°C

Minimum: Not applicable

STORAGE CONDITIONS

Store adhesive laminated metal foil sheets in a cool dry location away from any type of ignition sources. Keep away from incompatible materials such as strong oxidizing agents.

HANDLING

Dry to the touch adhesive laminated metal foil at room temperatures can be handled by hand. Do not touch heated or molten material. Metal foil substrates have sharp edges. Gloves not required but recommended when handling.

9. EXPOSURE CONTROL AND PERSONAL PROTECTION EQUIPMENT (PPE)

RESPIRATORY

No respiratory protection required.

SKIN

No special skin protection required.

EYE/FACE

No special eye/face protection required. Safety glasses recommended

HANDS

No special glove protection required. Due to sharp edges of foils, gloves are recommended.

10. PHYSICAL DATA

ADHESIVE FLASH POINT ADHESIVE MELTING POINT

460°F / 238°C

160°F / 71°C

SPECIFIC GRAVITY

0.98

SOLUBILITY IN WATER

None

VOLTAILES, % BY VOLMUE

None

APPEARANCE

Flexible foil sheet, 0.005" (0.13mm) to 0.007" (0.18mm) thick in varying sheet sizes

COLOR

Natural aluminum, copper, stainless steel or metallic blue, red, green, pink, gold, black depending on user selection

11. STABILITY AND REACTIVITY

CHEMICAL STABILITY

Stable under normal conditions of storage and handling

CONDITIONS TO AVOID

Avoid exposing adhesive to elevated temperatures at or above 428°F / 220°C

INCOMPATIBLE MATERIALS

Avoid contact with strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS

None anticipated under normal or recommended storage and handling conditions. If the adhesive portion of this product is exposed to elevated temperatures at or above 460°F / 238°C, combustion products may be generated (see section 6 of MSDS for Hazardous Combustion Products generated).

HAZARDOUS POLYMERIZATION

Not anticipated under normal or recommended handling or storage conditions.

12. TOXICOLOGICAL INFORMATION

Carcinogenicity Information

Not listed as a carcinogen by the National Toxicology Program (NTP). Not regulated as a carcinogen by the Occupational Safety and Health Administration (OSHA). Not evaluated by the International Agency for Research on Cancer (IARC).

13. DISPOSAL CONSIDERATIONS

This product, if discarded as produced, is not a Resource Conservation and Recovery Act (RCRA) listed as or characterized as hazardous waste. Disposal should be in accordance with all Federal, State and Local Regulations (see section 7 of MSDS for other disposal considerations)

14. TRANSPORT INFORMATION

Transportation of this product is not hazardous and is not regulated by the Department of Transportation (DOT). Shipment of this product should remain in its original packaging. Shipment of this product in its original packaging by methods of air, ground or sea is not hazardous and will not adversely affect the performance of the product.

Product Name GLUEFOIL
MSDS Number TB-MSDS-006 REV 01

15. REGULATORY INFORMATION

This material shipped contains no chemicals subject to the reporting of the Superfund Amendment Reauthorization Act (SARA) Section 313 and 40 CFR 372 and 370.2

16. OTHER INFORMATION

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and accurate and to represent the most reasonable current opinion on the subject when the MSDS was prepared. No warranty, guarantee or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in a combination of products, and determine its environmental compliance obligations under any applicable Federal, State or Local laws.

MSDS STATUS

Effective Date 02/22/07

For further information, contact the MSDS Coordinator at (949) 369-7676 or e-mail qmsinfo@streuter.com

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