



## Material Safety Data Sheet

**Material Name:** Calcium Silicate Insulation.

### Section 1 - Chemical Product and Company Identification

**Product Name:** Thermo-12® Gold

Manufacturer Information  
Industrial Insulation Group, LLC  
2100 Line Street  
Brunswick, GA 31520

**Chemical or Medical Emergency call INFOTRAC (24/7) 1-800-553-5053**  
**Outside the US call collect +1-352-323-3500**

### Section 2 - Composition and Information on Ingredients

CAS#	EINECS	Component	Percent	OSHA PEL	ACGIH TLV	UNITS
1344-95-2	215-710-8	Synthetic Calcium Silicate	>90	15	10	mg/M <sup>3</sup>
1344-09-8	1344-09-8	Sodium Silicate	0 - 6	15	10	mg/M <sup>3</sup>
9004-34-6	9004-34-6	Cellulose Fiber	0 - 4	15	10	mg/M <sup>3</sup>
61788-77-0	61788-77-0	Synthetic Cellulose Fiber	0 - 4	15	10	mg/M <sup>3</sup>
65997-17-3	266-17-3	Synthetic Vitreous Fiber	0 - 4	1	1	f/cc
51274-00-1	215-176-6	Iron Based Color	0 - 1	15	10	mg/M <sup>3</sup>

NE = Not Established

### Section 3 - Hazards Identification

**Emergency Overview:** Irritant

Appearance: Yellow semi-circle or block insulation with coloring throughout as a visual marker to indicate this is an asbestos-free product.

Odor: Odorless

Warning Statements: This product is an article and under normal conditions of use, this product is not expected to create any unusual emergency hazards. However, cutting, sawing, or abrading may increase the risk of personnel exposure. Pre-existing chronic respiratory, skin, or eye diseases or conditions may be aggravated by exposure to this product.

#### **Potential Health Effects**

Inhalation of excessive amounts of dust created when fabricating, cutting, or other mechanical alterations of the product may cause temporary upper respiratory irritation and/or congestion, remove affected individual(s) to fresh air. Breathing large amounts of dust or fibers from this product may lead to chronic health effects as discussed in Section 11 of this material safety data sheet.

Skin irritation may be treated by gently washing affected area with soap and warm water.

Eye irritation may be treated by flushing eyes with large amounts of water. If irritation persists, contact a physician.

### Section 4 - First Aid Measures

#### **First Aid: Inhalation**

Remove to fresh air. Drink water to clear throat, and blow nose to remove dust.

#### **First Aid: Skin**

Wash gently with soap and warm water to remove dust. Wash hands before eating or using the rest room. Never use compressed air to remove dust or fibers from the skin.

#### **First Aid: Ingestion**

Product is not intended to be ingested or eaten. If this product is ingested, irritation of the gastrointestinal (GI)

tract may occur, and should be treated symptomatically. Rinse mouth with water then drink plenty of water to help reduce the irritation. No chronic effects are expected following ingestion.

**First Aid: Eyes**

Do not rub or scratch your eyes. Dust particles may cause the eye to be scratched. Flush eyes with large amounts of water for 5-15 minutes. If irritation persists, contact a medical professional.

**First Aid: Notes to Physician**

This product is a mechanical irritant, and is not expected to produce any chronic health effects from acute exposures. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary.

**Section 5 - Fire Fighting Measures**

<b>Flash Point:</b>	Not applicable	<b>Method Used:</b>	Not applicable
<b>Upper Flammable Limit (UFL):</b>	Not applicable	<b>Lower Flammable Limit (LFL):</b>	Not applicable
<b>Auto Ignition:</b>	Not determined	<b>Flammability Classification:</b>	Non combustible
<b>Rate of Burning:</b>	Not applicable		

**General Fire Hazard:**

There is no potential for fire or explosion.

**Extinguishing Media:**

Use any extinguishing media appropriate for the surrounding fires.

**Fire Fighting Equipment/Instructions:**

No special procedures are expected to be necessary for this product. Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases produced by other materials.

**Section 6 - Accidental Release Measures**

**Containment Procedures:**

Pick up large pieces. Vacuum dust. If sweeping is necessary, use a dust suppressant such as water. Do not dry sweep dust accumulation or use compressed air for clean-up. These procedures will help to minimize potential exposures.

**Clean-Up Procedures:**

Wastes are not hazardous as defined by the RCRA (40 CFR 261). Comply with state and local regulations for disposal of these products. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the Environmental Protection Agency (EPA).

**Section 7 - Handling and Storage**

**Handling Procedures:**

Use protective equipment as described in Section 8 of this material safety data sheet when handling uncontained material. Good housekeeping practices should be used to prevent generation and accumulation of dusts. After handling product, wash face and hands before eating, drinking, or smoking.

**Storage Procedures:**

Warehouse storage should be in accordance with guide specifications and/or product data sheet. Material should be kept dry, and protected from the elements.

**Section 8 - Exposure Control and Personal Protection**

**General Product Information**

This product may contain trace amounts of crystalline silica as a natural contaminant in the raw materials. However, standard industrial hygiene air monitoring surveys conducted under normal and test (worst-case) situations have not detected any reportable crystalline silica in the respirable dust in the occupational environment.

**Personal Protective Equipment: Eyes/Face**

Safety glasses with side shields are recommended to keep product out of the eyes.

**Personal Protective Equipment: Skin**

Leather or cotton gloves should be worn to prevent skin contact and irritation. Barrier creams may also be used to reduce skin contact and irritation.

**Personal Protective Equipment: Respiratory**

A respirator should be used if ventilation is unavailable, or is inadequate for keeping dust and fiber levels below the applicable exposure limits. Operations such as sawing, fabricating, or cutting may generate airborne particulate concentrations requiring a higher level of respiratory protection. In those cases, use a NIOSH-certified disposable or reusable particulate respirator with an efficiency rating of N95 or higher (under

42 CFR 84) when working with this product. For exposures up to five times the established exposure limits use a quarter-mask respirator, rated N95 or higher. For exposures up to ten times the established exposure limits use a half-mask respirator (e.g., MSA's DM-11, Racal's Delta N95, 3M's 8210), rated N95 or higher. For exposures up to 50 times the established exposure limits use a full-face respirator, rated N99 or higher.

### **Ventilation**

In fixed manufacturing settings, local exhaust ventilation should be provided at areas of cutting to remove airborne dust and fibers. General dilution ventilation should be provided as necessary to keep airborne dust and fibers below the applicable exposure limits and guidelines. The need for ventilation systems should be evaluated by a professional industrial hygienist, while the design of specific ventilation systems should be conducted by a professional engineer.

### **Personal Protective Equipment: General**

Loose-fitting, long sleeved clothing should be worn to protect the skin from irritation. Exposed skin areas should be washed with soap and warm water after handling.

## **Section 9 - Physical & Chemical Properties**

**Appearance:** Semi-circle or block insulation with yellow coloring throughout as a visual marker to indicate this is an asbestos free product.

<b>Odor:</b>	Odorless	<b>pH:</b>	Not applicable
<b>Physical State:</b>	Solid	<b>Vapor Density:</b>	Not applicable
<b>Vapor Pressure:</b>	Not applicable	<b>Melting Point:</b>	1200 - 1500°C
<b>Boiling Point:</b>	Not applicable	<b>Specific Gravity:</b>	0.24 - 0.27
<b>Solubility (H<sub>2</sub>O):</b>	Nil	<b>Freezing Point:</b>	Not applicable
<b>Viscosity:</b>	Not applicable	<b>Evaporation Rate:</b>	Not applicable
<b>VOC:</b>	0, None	<b>Percent Volatile:</b>	0

## **Section 10 - Chemical Stability & Reactivity Information**

### **Chemical Stability**

This is a stable material. This product is not reactive.

### **Hazardous Decomposition**

None.

### **Hazardous Polymerization**

Will not occur.

## **Section 11 - Toxicological Information**

### **Carcinogenicity**

ACGIH: A4 - Not Classifiable as a Human Carcinogen.

IARC: Group 3, Not Classifiable.

## **Section 12 - Ecological Information**

This product should not have any impact on the environment.

## **Section 13 – Disposal Considerations**

Wear proper PPE as instructed in Section 8. This product is not regulated as a hazardous waste by the U.S. EPA under RCRA regulations. Comply with state and local regulations for disposal.

## **Section 14 - Transport Information**

Follow the instructions in Section 7.

US DOT Classification for highway: Not regulated.

IATA/ICAO Shipping Description: Not regulated.

IMO Shipping Description: Not regulated.

## **Section 15 - Regulatory Information**

SARA Hazard Notification/Reporting

Immediate = NO

Fire = NO

Sudden Release of pressure = NO

Delayed = NO

Reactive = NO

SARA Title 313, Toxic chemicals: None  
Extremely hazardous substances (EHS): None  
SARA/OSHA Hazardous chemical reporting quantity (RQ): None  
TSCA: None  
RCRA Hazardous waste: None  
WHMIS: D2B Irritant  
EINECS: Irritant  
Hazard symbols: Irritant, X

Risk phrases: R20, Harmful by inhalation; R22, Harmful if swallowed; R36, Irritating to eyes; and R37, Irritating to the respiratory system.

Safety phrases S2, Keep out of reach of children; S36, Wear suitable protective clothing; S39, Wear eye/face protection; and S51, Use only in well-ventilated areas.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

### **Section 16 - Other Information**

<u>NFPA</u>	<u>HMIS</u>	<u>Rating Scale</u>
1 - Health	1 - Health	0 Least
0 - Flammability	0 - Flammability	1 Slight
0 - Instability	0 - Physical	2 Moderate
No Special	E - PPE	3 High
		4 Severe

#### **Key/Legend:**

**EPA** = Environmental Protection Agency; **TSCA** = Toxic Substance Control Act; **ACGIH** = American Conference of Governmental Industrial Hygienists; **IARC** = International Agency for Research on Cancer; **NIOSH** = National Institute for Occupational Safety and Health; **NTP** = National Toxicology Program; **OSHA** = Occupational Safety and Health Administration; **NFPA** = National Fire Protection Association; **HMIS** = Hazardous Material Identification System; **RCRA** = Resource Conservation and Recovery Act; **CERCLA** = Comprehensive Environmental Response, Compensation and Liability Act; **SARA** = Superfund Amendments and Reauthorization Act; **DSL** = Canadian Domestic Substance List; **EINECS** = European Inventory of New and Existing Chemical Substances; **WHMIS** = Workplace Hazardous Materials Information System; **CAA** = Clean Air Act; **CHPA**=Canadian Hazardous Product Act; **IDL**=Canadian Hazardous Disclosure List

#### **Revision Summary:**

This is a revised MSDS which replaces Revision 1.0.8 Minor wording revision with new logo. Get this and other MSDS forms electronically via internet: <http://www.iig-llc.com>.

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Prepared by IIG Technical Services.