Industrial Insulation Group
A Calsilite/Johns Manville Joint Venture

Date: 11/11/2005
MSDS ID 20503
Rev 1.0.3
Replaces 12/3/2003

Material Safety Data Sheet

Material Name: High Temperature Adhesive

Section 1— Chemical Product and Company Identification

Product Name: Super Calstik® , CalBond™
CAS: Mixture/None Assigned
Generic Name: Adhesive (Industrial)
Formula: Mixture
Chemical Name: Mixture

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

Phone number for Health and Safety Information: 970.858.6211 (M-F, 7:00a.m. to 4:00p.m., Mountain Time)

Trade Name: Super Calstik; CalBond

Section 2 — Composition and Information on Ingredients

CAS #	Component	Percent	OSHA PEL	ACGIH TLV	NIOSH REL	UNITS
1317-65-3	Calcium Carbonate	40 – 60	15(T) 5(R)	10	NE	mg/M^3
9003-55-8	Styrene-Butadiene polymer	15 – 25	NE	NE	NE	
9003-04-7	Sodium Polyacrylate	1 – 5	NE	NE	NE	
1317-80-2	Titanium dioxide	1 - 10	10	10	10	mg/M^3
1344-09-8	Sodium silicate	15 – 30	15(T) 5(R)	10	NE	mg/M^3

NE = Not Established
ACGIH TLVs are 2003 values. OSHA PELs are those in effect on the date of preparation of this MSDS. The listed PELs, TVLs and RELs are time weighted average exposure limits.

Component Related Regulatory Information
This product may be regulated, have exposure limits or other information identified as the following:
Nuisance particulates.

Section 3 — Hazards Identification

Emergency Overview
APPEARANCE AND ODOR: Yellow or white, liquid. Faint odor.
Rubber gloves should be worn to prevent skin contact and irritation. Skin irritation may be treated by gently washing affected area with soap and warm water.
Goggles or safety glasses with side shields are recommended. Eye irritation may be treated by flushing eyes with large amounts of water. If irritation persists, contact a medical professional.
In the event of fire, use normal fire fighting procedures to prevent inhalation of smoke and gases from other products.
HMIS Rating: Health: 1, Fire: 0, Reactivity 0, Other: 0
WHMIS Class: Super Calstik and Calbond are not WHMIS controlled products

Potential Health Effects

Summary

May cause skin or eye irritation upon prolonged or repeated contact.

Inhalation

Not applicable

Skin

Temporary irritation, and dry skin may occur.

Absorption

Not applicable

Ingestion

This product is not intended to be ingested or eaten under normal conditions of use. If ingested, it may cause temporary irritation to the gastrointestinal (GI) tract, especially the stomach.

Eyes

Temporary irritation (itching) or redness may occur.

Target Organs

Skin and eyes.

Primary Routes of Entry (Exposure)

Skin and eyes.

Medical Conditions Aggravated by Exposure

Pre-existing skin or eye diseases or conditions may be aggravated by this product.

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Section 4 — First Aid Measures

First Aid: Inhalation

Not applicable

First Aid: Skin

Wash gently with soap and warm water.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Give several glasses of water or milk.

First Aid: Eyes

Do not rub or scratch your eyes. Dried adhesive 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

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

General Fire Hazards

There is no potential for fire or explosion.

Extinguishing Media

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.

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.

Section 6 — Accidental Release Measures

Containment Procedures

Spilled material is slippery and should not be walked on. Mix with dry absorbent and clean up.

Clean-Up Procedures

Wastes are not hazardous as defined by 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 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.

Storage Procedures

Do not store in aluminum tanks, as alkalinity will attack aluminum. Avoid freeze/thaw in storage. Avoid storage at temperatures above 35°C (95°F). The material thickens in high temperature storage

Section 8 — Exposure Control and Personal Protection

Personnel Protective Equipment

Personal Protective Equipment: Eyes/Face

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

Personal Protective Equipment: Skin

Rubber gloves should be used to help prevent excessive skin contact. Dried material is difficult to wash off.

Personal Protective Equipment: Respiratory

Not applicable

Ventilation

General dilution ventilation should be provided as necessary as vapors may be offensive to some individuals. 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

No additional information available.

Section 9 — Physical & Chemical Properties

Appearance:	Yellow or white	**Odor:**	Faint odor
Physical State:	Liquid	**pH:**	10.7
Vapor Pressure:	Not applicable	**Vapor Density:**	Not applicable
Boiling Point:	Not applicable	**Melting Point:**	Not determined
Solubility (H2O):	Miscible when wet	**Specific Gravity:**	Not applicable
Freezing Point:	Not applicable	**Solids Content:**	62% by weight
Evaporation Rate:	Not applicable	**Viscosity:**	7200 to 8500 cps
Percent Volatile:	32%	**VOC:**	<0.5%

Section 10 — Chemical Stability & Reactivity Information

C**hemical Stability**

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

Chemical Stability

Conditions to Avoid—Freeze/thaw causes the product to separate.

Incompatibility

Reacts with acid to form a gel. Will stain aluminum when wet.

Hazardous Decomposition

None identified.

Hazardous Polymerization

Will not occur.

Section 11 — Toxicological Information

Acute and Chronic Toxicity

General Product Information

The primary acute health effects of this product include mechanical irritation of the skin and eyes and skin dryness as a result of high pH.

Component Analysis - LD50/LC50

No LD50/LC50's are available for this product's components.

Carcinogenicity
General Product Information
OSHA, NTP, IARC, and ACGIH have not classified this product in its entirety as a carcinogen.
Component Carcinogenicity
Calcium Carbonate (1317-65-3)
ACGIH: A4 - Not Classifiable as a Human Carcinogen
Styrene-Butadiene polymer (9003-55-8)
IARC: Monograph 19, Supplement 7; 1987 (Group 3 (not classifiable))
Titanium dioxide (1317-80-2)
ACGIH: A4 - Not Classifiable as a Human Carcinogen
IARC: Monograph 47; 1989 (Group 3 (not classifiable))
Chronic Toxicity
May cause skin irritation upon prolonged or repeated contact.

Section 12 — Ecological Information

Ecotoxicity
General Product Information
No data available for this product.
Component Analysis - Ecotoxicity - Aquatic Toxicity
No ecotoxicity data are available for this product's components.

Section 13 — Disposal Considerations

US EPA Waste Number & Descriptions
General Product Information
This product, as supplied, is not regulated as a hazardous waste by the U.S. EPA under RCRA regulations. Comply with state and local regulations for disposal. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the EPA.
Component Waste Numbers
No EPA Waste Numbers are applicable for this product's components.
Disposal Instructions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14 — Transport Information

US DOT Information
Shipping Name: This product is not classified a hazardous material for transport.

Section 15 — Regulatory Information

US Federal Regulations
A: General Product Information
No information on this product as a whole.
B: Component Analysis
None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).
State Regulations
A: General Product Information
No information available for the product.
Other Regulatory Information
A: General Product Information
No information available for the product.
B: TSCA Status
This product and its components are listed on the TSCA 8(b) inventory.
None of the components listed in this product are listed on the TSCA Export Notification 12(b) list.
WHMIS Classification
This material is classified as Class E--Corrosive Material
International Regulations

Component Analysis - WHMIS IDL

The following components are identified under the CHPL IDL:

Sodium Silicate—CAS 1344-09-8

Section 16 — Other Information

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

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; 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 Product List

Revision Summary:

This is a revised MSDS which replaces Revision 1.0.2 with new formatting and clarified exposure limits. A new ID number has been issued to be consistent with other IIG documents. Get this and other MSDS forms electronically via Internet: http://www.iig-llc.com or by calling 1-970-858-6200.

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.

IMPORTANT SAFETY NOTICE: The information in this MSDS relates only to the specific material described herein and does not relate to use in combination with any other material or substance or in any process.
Because of the use of this information and the conditions of use of this product are not within the control of Industrial Insulation Group, it is the users obligation to determine the conditions of safe use of this product. Users of this product should study this MSDS and become aware of the product hazards and safety information before using this product. Users should also notify their employees, agents, and contractors regarding information contained in this MSDS and any product hazards and safety information in order to provide for safe use of this product.