



MATERIAL SAFETY DATA SHEET

SECTION 1. COMPANY IDENTIFICATION

COMPANY NAME : GIO CORP.,

MIHO B/D 4F, 394-10, GALHYUN-DONG, EUNPYUNG-GU, SEOUL, KOREA

Tel : 82-2-1644-6582 Fax : 82-2-383-6582

PRODUCT NAMES : SEALANT SOLARSIL S101

SUBSTANCE: ACRYLIC SEALANT

CREATION DATE: DEC 14. 2003

SECTION 2. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENTS	CAS No	CONTENT tent(%)
ACRYLIC EMULSION	-	29
CALCIUM CARBONATE	471-34-1	52
DIOCTYL PHTHALATE	117-81-7	7
TITANIUM DIOXIDE	13463-67-7	3
WATER		4
OTHER		5

SECTION 3. HAZARDS IDENTIFICATION

EYE CONTACT:

Short-term effects : No data available

Long-term effects : No data available

SKIN CONTACT:

Short-term effects : The stimulus can be happended.

Long-term effects : No data available

INHALATION

Short-term effects : No data available

Long-term effects : No data available

ENGESTION:

Short-term effects : No data available

Long-term effects : No data available



SECTION 4. FIRST AID MEASURES:

EYE CONTACT : Wash eyes immediately with large amounts of water. get medical attention immediately.

SKIN CONTACT : Remove contaminated clothing and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minute. Get medical attention immediately.

INHALATION : Remove from exposure area to fresh air immediately. Perform artificial respiration if necessary. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention if needed.

INGESTION : If vomiting occurs, keep head lower than hips to help prevent aspiration. Treat symptomatically and supportively. Get medical attention if needed.

INFORMATION TO DOCTOR : No known detoxificants. Treat according to symptoms.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT : No data available

SPONTANEOUS COMBUSTION POINT : No data available

MINIMUM FLAMMABLE LIMITS : No data available

MAXIMUM FLAMMABLE LIMITS : No data available

FLAMMABILITY CLASS(OSHA) : No data available

FIREFIGHTING : Move container from fire area if you can do it without risk. Do not scatter spilled material with high-pressure water streams. Dike fire-control water for later disposal. Use agents suitable for type of surrounding fire. Avoid breathing hazardous vapors, keep upwind

HARZARDOUS COMBUSTION PRODUCTS : Combustion will produce CO₂, water, sand, regulated foam

TOXIC MATERIAL ON BURNING : Chemical toxic carbon combination may be included.

THE FIRE EXTINGUISHER NOT TO BE USED : Information provided.

SECTION 6. ACCIDENTAL RELEASE MEASURES:

STEP TO BE TAKEN TO PROTECT FROM BODILY HARM : Keep unnecessary people away.

STEP TO BE TAKEN TO PROTECT ENVIRONMENT : Collect spilled material in appropriate for later disposal keep out of water supplies and sewers. keep unnecessary people away isolate hazard area deny entry.

SECTION 7. HANDLING AND STORAGE

HANDLLING : Observe all federal, state and local regulations when storing this substance.

STORAGE : Store in a dry place. Store in tightly closed container.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS : Use adequate ventilation to keep airborne concentration low.



EYE PROTECTION : Operator should wear splash resistant or particle resistant safety goggles. to avoid eye contact with chemical material. An emergency eye wash fountain and quick drench shower should be installed in the immediate work area.

RESPIRATORY PROTECTION : The following respiratory protection equipment is recommended by information obtained from various data sources related to toxicity and health. The listed respiratory protection equipment are ranked in the order of minimum requirements to maximum requirements.

The selected respiratory protection equipment should be based on pollution levels and production processes in the working area, and should not exceed the maximum operating limits of the respiratory protection equipment. Products should be approved by NIOSH/MSHA : Respiratory protective equipment for particles and mist Supplied air purifying respiratory protective equipment with high efficiency particle filter : Supplied air purifying respiratory protective equipment with particle and mist filter. : C type air supply(ventilating type) respiratory protective equipment with pressure-demand or positive-pressure mode. Self-contained respiratory equipment. **PROTECTIVE BODY AND GLOVES** : Operator should wear appropriate(imprevious) protective clothing to avoid repetitive or long-term contact with chemical material.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : White viscous paste

Odor : Odorless

PH : 7 ~8

SOLVENT SOLUBILITY : No data available

BOILING POINT/RANGE : No data available

MELTING POINT : No data available

VAPOR PRESSURE : No data available

VAPOR DENSITY : No data available

SECIFIC GRAVITY : 1.55

MOLECULAR WEIGHT : No data available

DISTRIBUTING COEFFICIENT : No data available

VISCOUSITY : 90,000 ~ 110,000cps

SECTION 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY : Stable under normal temperatures and pressures.

CONDITIONS TO AVOID : Avoid all possible sources of ignition (spark or flame)

HAZARDOUS DECOMPOSITION PRODUCTS : carbon oxides(CO, CO2)

HAZARDOUS POLYMERIZATION : No data available

SECTION 11. TOXICOLOGICAL INFORMATION



ACRYLIC EMULSION

TOXICITY DATA : Inhalation : No data available

CARCINOGEN STATUS : OSHA - None : NTP - None : IARC - None

ACUTE TOXICITY DATA : No data available

CHRONIC DATA : No data available

MUTAGENIC DATA : No data available

REPRODUCTIVE EFFECTS DATA : No data available

TOXICITY DATA : Inhalation : No data available

CARCINOGEN STATUS : OSHA - None : NTP - None : IARC - None

ACUTE TOXICITY DATA : No data available

CHRONIC DATA : No data available

MUTAGENIC DATA : No data available

REPRODUCTIVE EFFECTS DATA : No data available

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY : No data available

ENVIRONMENTAL FATE : No data available

PERSISTENCE/DEGRADABILITY : No data available

BIOACCUMULATIVE POTENTIAL : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE INFORMATION : Dispose of in accordance with applicable local and national regulations.

Avoid contact of spill material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated material as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities.

SECTION 14. TRANSPORT INFORMATION

No classification currently assigned.

SECTION 15. REGULATORY INFORMATION

No data available

SECTION 16. OTHER INFORMATION

THE SOURCE OF DATA: This MSDS is for the purpose of providing references to other enterprises which asking the MSDS by the Industrial Safety and Health Law, the 41st article. Therefore the H.J CHEMICAL (Co.) does not take any responsibility about any technical or legal responsible for this document.