FUJI CHEMICAL INDUSTRIAL CO., LTD.
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MATERIAL SAFETY DATA SHEET

PRODUCT NAME : *Seal-glo* NE3000S
CHEMICAL FAMILY : One Component Epoxy Resin Adhesive

SECTION 1 - COMPANY IDENTIFICATION

MANUFACTURE'S NAME : FUJI CHEMICAL INDUSTRIAL CO., LTD.
ADDRESS : 2-3-2, Nagata Higashi, Higashi Osaka-City, Osaka 577-0012 Japan.
URL : http://www.fujichemi.com
EMERGENCY TELEPHONE NUMBER : 81-6-6744-8800 (Available only during office hours)
DATA PREPARED : 10/09/2008
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SECTION 2 - HAZARDOUS IDENTIFICATION

2-1 GHS Classification
2-1-1 physical Hazards Sensitization
2-1-2 Health Hazards
Skin corrosion/irritation: Causes skin irritation (GHS Category 2)
Serious eye damage / eye irritation: Causes eye irritation (GHS Category 2B)
Skin sensitization: May cause an allergic skin reaction (GHS Category 1)
2-1-3 Environmental Hazards
Hazardous to the aquatic environment (acute):
Very toxic to aquatic life (GHS Category 1)
Hazardous to the aquatic environment (chronic):
Very toxic to aquatic life with long lasting effects (GHS Category 1)

2-2 GHS Label Elements
2-2-1 Pictograms


2-2-2 Signal Word
Warning
2-2-3 Hazard Statements
- Causes skin irritation
- Causes eye irritation
- May cause an allergic skin reaction
- Very toxic to aquatic life
- Very toxic to aquatic life with long lasting effects

2-3 Precautionary Statements
Prevention
- Wear the protection glove, protection glasses, the protection side, and the protection clothes.
- Wash your hand well after handling.
- Avoid the discharge into the environment.

Emergency response
- When adhering to the skin or the hair: Wash with plenty of water and soap.

- Wash when polluted clothes are taken off, and used again.
- Receive the doctor's treatment when you generate the cutaneous stimulus.
- When it enters eyes: Wash in water for several minutes carefully. Next, remove when it is possible to remove easily by having worn the contact lens. Keep washing it afterwards.
- Receive the doctor's treatment when the stimulation of eyes continues.

Storage

- The thing that seals up the container and stores it to the cold place or the refrigerator of 10℃ or less or 2℃ or more is observed strictly.

Disposal

- Have contents and containers disposed by special waste disposers with permits from governors.

SECTION 3 – Composition and information ingredients

Pure Substance or Mixtures Mixtures

Ingredient names	Content (wt%)	Class reference number in the gazetted list (Chemical Substance Control Law)	CAS No.
Bispenol A type epoxy resin	50~60%	7-1283	25068-38-6
Carbon dioxide	20~30%	1-222	471-34-1
Hardening agent	10~20%	Registered	Registered
Silica	1~10%	1-548	Registered
Boron compound	0.1~0.5%	A small quantity new chemical substance	55089-03-7
Dye	0.1~0.5%	5-5197	Registered

Hazardous ingredients: I refer to the “Current regulation” of the last page about the chemical substance

SECTION 4 – First-aid measures

Eye Contact

- When a pain is left after having washed eyes with clean water for minimum 15 minutes, I receive treatment for the ophthalmologist promptly.
- In the case of washing eyes, I wash it I open eyelids with a finger well, and water is good, and to be spread out to an eyelid, the every corner of the eyeball.

Inhalation

- I throw off polluted clothes, shoes immediately. I wash away the part where I touched with a large quantity of water.
- I receive treatment for the doctor when I produced inflammation to skin.

When inhaling

- Is fresh; it is basic to air. I entrust it to the measures of the doctor.

When I swallowed it

- I receive treatment for the doctor promptly after having let I serve it a large quantity of water and spit it out.
- A mouth must give a victim without consciousness anything and is wrong to let you vomit.

SECTION 5 – Fire-fighting measures

- I use powder, carbon dioxide, dry sand for an early fire. I use bubble digestives, and, in the case of the large-scale fire, it is effective to intercept air.

・The use of the stick water escalates a fire, and there is a dangerous case.
  ・I water neighboring facilities and, in the case of neighboring fires, cool off.
  ・I move the removable container to the safe place immediately.
  ・I perform the fire extinguishing work from windward and wear a breathing protection ingredient by all means.
  ・I let the safe place evacuate other than the person concerned.
  ・Because the poisonous gases such as the carbon monoxide are included to a flue gas, in the case of the fire extinguishing work, I avoid inhalation of the smoke.

A digestive: Carbon dioxide, bubble digestive, powder, dry sand, fog-shaped water

SECTION 6 – Accidental release measures

・I let a person of the lee shunt. I remove a thing becoming the nearby firing source immediately.
・I prepare for machine parts for fire extinguishing.
・I wear a tool for protection in the case of the work by all means. I do not work at the lee.
・I let sawdust, a waste, sand absorb the leak liquid and, in the case of a small quantity, collect it in an empty container.
・In the case of a large quantity, I stop the flow with the earth and sand and I cover the surface of the liquid by a bubble and collect it in sky container as much as possible.
・It is desirable to use the safe shovels which do not occur with fireworks.

SECTION 7 – Handling and storage

The handling
・As the firing source by fire, static electricity, the shock spark does not occur, I am careful.
The prevention of the leak
・The wearing of the tool for personal protection for prevention of contact / the inhalation（The use of glasses / gloves）
・I install a local exhaust.
・I avoid contact with the strong oxidizer.
・I handle it and wash a face and hands and feet well afterward.
Safekeeping
・I avoid direct rays of the sun and do not bring firing source, a high temperature thing close.
・It is not allowed to coexist with oxidized material and others prohibition material.
・Seal up without fail after use and keep it.
・The thing stored to the cold place or the refrigerator of 10℃ or less is observed strictly.

SECTION 8 – Exposure controls and personal protection

The management density: It is not set.
Permissible density Japan Association of Industrial Health:
(Version in fiscal year 2003) Two oxidation silicon total dust 8 mg/m$_3$
ACGIH: (Version in fiscal year 2001)Two oxidation silicon TLV-TWA 10 mg/m$_3$
An anti-facilities measure: You must not handle it if you do not use a device, machinery sealed up or a local exhaust. Near a handling place, I establish washing eyes and the facilities for physical washing.
Protection tool

Gloves, boots, and apron of air-supplied respirator, compressed air open-circuit SCBA, protective glasses or disaster prevention side and oily (impermeable) when hazard mask (for organic gas) and density are high(Use it for the static electricity prevention measures.)

SECTION 9 – Physical and chemical properties

Externals : Red high viscous paste
Smell: Epoxy smell
PH: Information none
Melting point/freezing point: Information none
Boiling point, Hatshatsten, and boiling range: Information none
Flash point : 260℃ or more
Fire point: Information none
Explosion limit: Information none
Vapor pressure: 0.33kPa/100℃
Density of steam: Information none
Specific gravity: 1.38
Solubility: It hardly melts to water.
An explosion limit: There is no information
Resolution temperature: Information none

SECTION 10 - Stability and reactivity

Stability: It is necessary to note it to become unstable by heat.
A dangerous, harmful, reactive possibility: It reacts with a medicine of making to the strong acid, a strong Lewes acid, a strong mineral acid, strong inorganic base, and the organic base.
Condition that should be avoided : Origin of fire and direct sunshine
Cosawa dangerous article quality : Medicine of making to strong acid
Dangerous, harmful resolution product : Aldehyde, acid, and organism

SECTION 11 - Stability and reactivity

・Harmful nature report of Bisphenol A type epoxy resin
Acute toxicity : Rat oral LD_{50}1400mg/kg
The cutaneous stimulus: The skin might be stimulated.
The eye stimulation: Eyes might be stimulated.
The mutation field: As a result of a harmful investigation of the Ministry of Labor, the mutation field where a prescribed standard is exceeded by the mutagenicity test that uses the microorganism and two kinds of mutagenicity tests on the chromosomal abnormality examination that uses the mammal culture cell is admitted, and it descends, and there is a possibility of causing health problems.
It is necessary to take the treatment provided in the Ministry of Labor indicator.
Cantsc : Fear to cause allergic skin reaction.
There is that takes the treatment provided in the Ministry of Labor indicator.
・Harmful nature report of a hardening agent
Skin pungenc: I can cause cutitis when I touch skin.
Skin is corrosive: I show causticity for eyes / skin / lungs.
The chronic toxicity: Digestive organs abnormality (diarrhea, vomiting), nervous system abnormality (dizziness, a headache) occur by breathing, skin absorption.
Acute toxicity: Rat oral LD_{50}>2000mg/kg
The first skin pungency: There is weak stimulation

・Harmful nature report of a Silica
Acute toxicity : Rat oral LD_{50}>3000mg/kg

SECTION 12 - Ecological information

Information on the raw material of this product is as follows though there is no finding concerning this product immediately.
The resolution : There is no rapid degradation. (resolution level by BOD: 0%)
Resolution: Fish toxicity without rapid degradation (Resolution level by BOD: 0%):
LC_{50}＞2.4mg/L (Zebra fish 96hr)
Accumulation: Information none

SECTION 13 - Disposal considerations

In case of a large amount: It requests it to the trader who has the permission of industrial waste disposal based on Wastes Disposal and Public Cleaning Law.
In case of little: Ues etc. are made to adsorb it and it incinerates.
Disposal of used container and wrapping bag:
it does by incineration according to the administrative divisions ordinance or it disposes as industrial waste (resin rubbish).

SECTION 14 - Transport information

The United Nations classification : It is not classified.
The United Nations number : It is not classified.
The handling and attention in the safekeeping :
I am similar and depend on others by mention, general instructions about the others toxic substance. I suddenly do Maneba when exposed to temperature more than 45 degrees Celsius and because I begin to stiffen, on the occasion of transportation safekeeping, I can enter the insulation case of Cool service, dry ice or the entering cold insulation agent and transport it.

SECTION 15 - Current regulations

In Japan:
Fire Service law: Specified combustible combustible solid
Industrial Safety and Health Law
: Silica of quality for notification(silicon dioxide)
: Mutation field chemical (Bisphenol A type epoxy resin)
Labor Standards Law:
Industrial injury recognition material (Bisphenol A type epoxy resin)
PRTR method object quality: (Bisphenol A type epoxy resin 50% First class-30)
(Boron compound 0.3% First class-304)
Wastes Disposal and Public Cleaning Law :(industrial waste)
Air pollution control law: Poisonous substance when burning
Sea Pollution Prevention Act: B material
Export Control Order: I fall（Catch-all controls object product）
(Bisphenol A type epoxy resin)

In EC:

EC Label name: Epoxy resin (Number Average Molecular Weight<700)
EC Classification: Irritant. Dangerous for the environment.
EC Symbols: Xi, N
EC Risk phrases: R36/38:Irritating to eyes and skin.
R43:May cause sensitization by skin contact.
R51/53:Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
EC Safety phrases : S24: Avoid contact with skin. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28: After contact with skin; wash immediately with plenty of soap and water.
S37/39: Wear suitable gloves and eye/face protection.
S61: Avoid release to the environment.
Refer to special instruction /Safety dada sheets.
EINECS(EC): NLP No.500-033-5
EC Annex I number: 603-074-00-8

For Industrial Use only
This Material Safety Data Sheet was prepared on the basis of materials' information and data obtained at present by our company. To the best of our knowledge, the information contained here in is accurate. Final determination of suitability of all material is the sole responsibility of the user. All material may present unknown hazards and should be used in caution. We provide no warranties, either express or implied, and assume no responsibility for the accuracy or completeness of the data contained herein.

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		製 品 名：*Seal-glo* NE 3000S			
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－	初版制定	2008/09/10	津田	重本	後藤
A	書式変更、ＥＣ用適用法規追加	2008/12/12			
B					
C					