Creation date MAY 24, 2012

Amendment date JAN 17, 2020

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : SUNPAT L (Hardener)

COMPANY NAME : BANDO CHEMICAL INDUSTRIES, LTD.

ADDRESS : TSUCHIYAMA, HIRAOKA-CHO, KAKOGAWA, HYOGO 675-0104 JAPAN

PHONE NUMBER : 078-942-8774/ JAPAN FACSIMILE NUMBER : 078-941-0386/JAPAN

REFERENCE NUMBER: 1095

RECOMMEND USE : Used as an adhesive for Conveyor Belt by adding of a

predetermined amount to principal agent.

(This unit is not adhesive)

2. HAZARD IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE PHYSICAL HAZARDS

 Explosives : Not applicable Flammable gases : Not applicable • Flammable aerosols : Not applicable · Oxidizing gases : Not applicable Gases under pressure : Not applicable Flammable liquids : Not classified Flammable solids : Not applicable Self-reactive substances and mixtures : Not applicable Pyrophoric liquids : Not classified Pyrophoric solids : Not applicable Self-heating substances and mixtures : Unclassifiable Water-reactive flammable chemicals : Not applicable Oxidizing liquids : Not applicable : Not applicable Oxidizing solids : Not applicable Organic peroxides Corrosive metals : Unclassifiable

HEALTH HAZARDS

Acute toxicity (oral)
 Acute toxicity (skin)
 Acute toxicity (inhalation: gas)
 Not classified
 Unclassifiable
 Not applicable

Acute toxicity (inhalation: vapour) : Not classified
 Acute toxicity (inhalation: dust, mist) : Category 4

Skin corrosion / irritation
 Serious eye damages / eye irritation
 Respiratory sensitization
 Skin sensitization
 Germ cell mutagenicity
 Category 1
 Not classified

Carcinogenicity : Not classified
 Reproductive toxicity : Not classified

 Specific target organ toxicity : Category 3 (Respiratory tract irritation) single exposure

Specific target organ toxicity : Unclassifiable repeated exposure

Aspiration hazard : Unclassifiable

ENVIRONMENTAL HAZARDS

Aquatic toxicity (acute)
 Aquatic toxicity (chronic)
 Not classified

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS SYMBOL





SIGNAL WORD: Danger HAZARD STATEMENT

- Inhalation risk to life (dust)
 - Skin irritancy
 - Strong eye irritation
 - May cause allergic or asthmatic symptoms or breathing difficulties if inhaled
 - May cause an allergic skin reaction
 - May cause respiratory irritation
 - Reacts with water forming CO2. Closed containers may rupture owing to increase of pressure.

3. COMPOSITIO/INFORMATION ON INGREDIENTS

Description on Product

Kind: Polyisocyanate compound

Components and contents (subject to hazardous toxic substances)

Ingredient	CAS No.	Contents (%)
4,4' -diphenylmethane diisocyanate	101-68-8	65-75
Bis(2-ethylhexyl) adipate	103-23-1	5–15
(exclusive material)	_	20-30

4. FIRST AID MEASURES

Eye Contact:

- Immediately wash eyes with large volumes of clean running water for at least 15 minutes.
- Thoroughly wash even the back of eyelid.
- · Get medical aid as soon as possible.

Skin Contact:

- Quickly wipe away the stuck material with cloth.
- Thoroughly flush the affected area with large quantities of running water and soap or detergent for skin. Never attempt to use any solvent or thinner.
- If any change is observed in appearance or pain persists, immediately take necessary procedure to seek medical attention.

When Inhaled:

- Immediately direct the victim to go out to a place with fresh air.
- If the victim feels nausea, obtain medical attention.

When Ingested:

- Never give anything by mouth to an unconscious person.
- Get medical aid.

5. FIRE PROCEDURES

Applicable fire extinguishers:

Water [×] Carbon Dioxide [O] Foam [O] Powder [O] Dry sand [O]Others [] Fire-fighting method:

- Powder, carbon dioxide, or dry sand are effective in the case of early fire-fighting,.
- Do not use water for fire-fighting.
- Wear proper protective devices (heat-resistant clothes, etc.).

6. SPILL, LEAK, AND DISPOSAL PROCEDURES

- · Wear proper protective devices (gloves, safety mask, apron, goggles, etc.)
- Recover spilled product into containers that may be tightly stoppered, and transfer them
 to safe space.
- Spilled product must be neutralized using neutralizing agent.
- Allow dry sand, earth, and other noncombustibles to adsorb the spilled product to recover. In the case of large-quantity spillage or leakage, enclose with the fill to prevent outflow.
- Transfer into container and do not seal owing to evolution of CO2.
- Prepare suitable extinguishers to provide against ignition.
- Remove with non-sparking tools.
- Dispose of stuck material, wastes, etc. must be conformed to applicable laws and regulations.

Example of neutralizing agent: water/sodium carbonate/liquid detergent =90-95/5-10/0.2-0.5 (weight ratio)

7. PRECAUTIONS FOR HANDLING AND STORAGE

Precautions for handling:

- · Handle in a well-ventilated place.
- Tightly seal the container each time it is used.
- Prohibit the use of fire, spark, and high-temperature material in the vicinity.
- Use explosion-proof equipments.

Precautions of storage:

- Keep container dry and tightly closed in a cool and well-ventilated place.
- Keep away from fire and heating source for storage.
- · Avoid invasion of rain water.
- · Avoid direct sun rays.
- Keep container between the temperature of 15° C and 40° C.
- Below 15° C, this product may be crystallized, cloudy and form deposits. In this case, this container must be warmed by heated water between the temperature 50° C and 60° C.

8. PREVENTION OF EXPOSURE

Prevention measures for equipment:

- Install localized exhaust system, etc. to prevent workers from direct exposure.
- Use explosion-proof type equipment for handling.
- Equipment for transporting, scooping, agitating etc. must be electrically grounded.

Protective devices:

Eye protection: Wear safety goggles or spectacles.

Skin protection: Wear gloves of material that does not allow organic solvent or chemicals

to permeate.

Respiratory protection: Wear respirator for organic gas.

In a confined place, wear an air-supplied respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Condition : Liquid

Color : yellow to brownish

Smell : Boiling point : Vapor pressure : Density (specific gravity) : pH value : Others : -

10. FIRE AND EXPLOSION HAZARD INFORMATION (STABILITY AND REACTIVITY)

<u>Product characteristics:</u>

Flash point : Autoignition temperature : Lower explosion limit : -

Reactivity and Stability Information:

Hazardous substance by contact: Exothermic reaction with amines, alcohols, acids, and alkali.

Generation of toxic gas by combustion: CO and NOx, gas, etc. are generated.

Other reactivity information: Reacts with water forming CO2. Closed containers may rupture owing to increase of pressure.

Other Explosion Hazard Information:

Particular information not available.

11. HEALTH HAZARD INFORMATION (INCLUDING SYMPTOMS ON HUMANS AND EPIDEMIOLOGICAL INFORMATION)

Health Hazard and Exposure Concentration Criteria of Component Materials

Material name	Control	AGGIH (ppm)
	concentration	
4,4' -diphenylmethane diisocyanate	-	0. 005
Bis(2-ethylhexyl) phthalate	_	_

Other Health Hazard Information on Component Material

Particular information not available.

Health Hazard Information on Product

Particular information not available.

12. ENVIRONMENTAL IMPACT INFORMATION

• In the case of leakage or disposal, the liquid may have detrimental effects on the environment, and utmost care is requested in handling. In particular, the effective measures must be taken to prevent the product and/or the water used to wash it from directly flowing into ground surface, rivers, and drainage conduits.

13. PRECAUTIONS FOR DISPOSAL

- Dispose of wastes such as wastes, containers, etc. by executing disposal agreement with licensed waste disposal service provider.
- Do not attempt to allow wastewater, etc. used for cleaning containers, equipment, devices, etc. to directly flow into ground surface or drainage conduits.
- Dispose of or entrust disposal of wastes generated by wastewater treatment, incineration, etc. in conformity to Waste Disposal & Public Cleansing Law and applicable laws and regulations.
- When wastes, etc. are incinerated, use an incinerator equipped with an appropriate scrubber because toxic gas is generated.

14. PRECAUTIONS FOR TRANSPORTATION

Common Matters: Abide by the description under the Section of "Precautions for

Handling and Storage".

Check containers for no leakage, and load them carefully to avoid

tumbling, dropping, damage and collapsing.

Land Transportation: If the Fire Service Act, Industrial Safety and Health Law, or

Poisonous and Deleterious Substances Control Law applies, abide

the transportation method set forth in the relevant laws.

Marine Transportation: Abide by the provisions set forth in the Shipping Safety Law.

Air Transportation: Abide by the provisions set forth in the Air Navigation Law.

UN No.: not available
UN classification: not available

15 APPLICABLE LAWS

No information

16. ADDITIONAL INFORMATION (INQUIRY FOR CONTENTS, REFERENCES, ETC.)

• Japan Paint Industrial Association : "Raw Material Substance Database"

NOTE: The danger and hazard have not always been completely assessed.

Take utmost care in handling.