Implementation: 2013-6-4 Revision: 2015-9-1

SAFETY DATA SHEET

1. Product and company(manufacturer) identification

Product: Eslotight A

Manufacturer: Sekisui Chemical Co., Ltd.

Address: Toranomon 2-3-17, Minato-ku, Tokyo 105-8450

Urban Infrastructure & Environmental Products Company Responsible section:

Waterworks and Sewerage Division

03-5521-0756 Telephone: Urgent telephone: 03-5521-0756 03-5521-0557 Fax: Urgent contact: same as above

Document number: Es-A

2. Hazards identification **GHS Classification**

Physicochemical hazards:

Health hazards:

Explosives Not Applicable Flammable gases Not Applicable

(including chemically unstable

Aerosols Not Applicable Oxidizing gases Not Applicable Not Applicable Gases under pressure Flammable liquids Not Applicable Not Classified Flammable solids Self-active chemicals Not Applicable Pyrophoric liquids Not Applicable Pyrophoric solids Not Classified

Self-heating chemicals Classification Not Possible

Chemicals which, in contact with

water, emit flammable gases

Oxidizing liquids Not Applicable Oxidizing solids Not Applicable Organic peroxides Not Applicable Not Classified Substances corrosive to metals

Acute toxicity (oral) Not Classified

Acute toxicity (dermal) Classification Not Possible Acute toxicity (inhalation: gas)

Not Applicable

Not Applicable

Acute toxicity (inhalation: vapor) Classification Not Possible Acute toxicity (inhalation: dust and Classification Not Possible

mist)

Skin corrosion/irritation Category 2 Eye damage/irritation Category 2B

Respiratory sensitization Classification Not Possible

Skin sensitization Category 1 Germ cell mutagenicity Not Classified

Carcinogenicity Classification Not Possible

Reproductive toxicity Not Classified

Specific target organ toxicity (single Classification Not Possible

exposure)

Specific target organ toxicity

(repeated exposure)

Classification Not Possible

Aspiration hazard Not Classified Hazard to the aquatic Category 1

environment(Acute hazard) Hazard to the aquatic

Category 1

environment(Long-term hazard)

Hazard to the ozone layer Classification Not Possible

Pictogram or symbol:

Environmental hazards:



Warning



Signal word:

Hazard statement: Causes skin irritation

Causes eve irritation

May cause an allergic skin reaction

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

Precautionary statement: The product may cause skin affection or intoxication if touched to the skin or

inhaled the vapor. Please observe the precautions given below and refer to the

SDS and the instruction sheet for safe handling.

Avoid skin contact during handling and wear Eyeglasses, long-sleeved shirts and

gloves. Use respirator as needed.

Wash hands and gargle sufficiently after handling.

Close the cap of container tightly and store it in a cool, dark space.

If the adhesive touched to skin, wipe the local spot immediately and wash well

using soap. If itch or inflammation is felt, seek physician's counsel.

Never use the adhesive for other purposes than intended.

3. Composition/information on ingredients

Nature of composition: **Mixture**

Chemical or common name: Liquid epoxy resin

Component	CAS Number	Content
Reaction product of bisphenol A and epichlorohydrin	25068-38-6	41%
Urethane modified epoxy resin	Non Disclosure	20 to 30 %
Titanium Oxide	13463-67-7	1 to 10 %
Calcium carbonate	471-34-1	25 to 35 %

4. First-aid measures

If vapor is inhaled: Take the affected person to a clean-air space and give him rest in a easy-

breathing pose.

Seek physician's counsel as may be needed.

If touched to skin: Wash the skin immediately with a lot of water and soan.

Take off the contaminated clothing's for cleaning.

Seek physicians counsel if he suffers from irritation or drowsiness.

If gets in eye: Thoroughly wash the eye with clean water for a several minutes. Remove contact

lens if easily removable. Continue washing after removal.

Seek physician's counsel.

If swallowed: Immediately wash the mouth with water.

Immediately seek physician's counsel.

Rinse the mouth well and drink a lot of water to vomit.

Special note to physician: No information

5. Fire-fighting measures

Extinguishing agents: Carbon dioxide, powder agent, foam agent

Prohibited extinguishing agent: Water flux

Specific hazards: Fire may cause to generate irritant, toxic or erosive gas.

Easily flammable. It will readily be ignited by heat, spark or flame.

Heating of container may cause explosion.

Easily inflammable liquid and vapor.

Proper extinguishing method: Remove surrounding combustibles and use extinguishing agents.

Use foam agent to choke a large scale fire.

Fight against fire standing to its windward as much as possible and wear

Respirator if necessary.

6. Accidental release measures

Health hazard precaution, protective wear and first- Workers should use protective wears (See Chapter 8) to prevent contact with

the spilt adhesive and inhalation of its vapor.

Rope off the crowd from the leak spot.

Environmental hazard precaution: Prevent flow out to river, etc. so as not to badly affect the environment.

Recovery and neutralization: For small scale leakage, use absorbent (sawdust, dirt, sand, waste rug) to remove

most of the spill and wipe off the rest using waste rug. For large scale leakage, build bank around the spill and lead the liquid to a safer

place for recovery.

Prevention of secondary casualty: Quickly remove all the combustibles from around the leak spot and provide

extinguishers ready for use.

7. Handling and storage precautions

Handling

Technical measures: Use protective wears if inhalation or skin contact is foreseen.

Fire ban.

Local & total ventilation: Handling work must be practiced in a room where local or total ventilation facility

is functioning.

Safe handling: Ban of high temperature substance, sparking and fire at nearby points.

Prohibition of eating, drinking and smoking while the product is used.

Wash hands well after handling.

Avoid contact of the product with eye, skin and clothing. Do not inhale vapor, mist and spray of the product.

Handle it only after reading and understanding all the precautions. Use the product only in a well ventilated room or outdoors.

Storage

Storing conditions: Store in a remote room from heat, sparks and naked flame. No smoking in the

storage room.

Store in a cool, ventilated room. Lock the storage room.

8. Exposure controls and personal protection

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent vapor

inhalation.

Control concentration:

not decided

Permissible concentration (Exposure limit, Biological exposure guide line)

Japan society for occupational health.

not decided (2005 version) ACGIH (2005 version) TLV-TWA not decided

Protective wears:

Respiratory protection: Use aspirator with appropriate filter

Hand protection: Impermeable gloves Eye protection: Solvent-resistant goggles Skin and body protection: long-sleeve fatigue uniform Hygienic measures: Wash hands well after handling.

9. Physical and chemical properties

Viscous Liquid Form:

Color: White Odor: Slight specific gravity 1.26

Melting point: Data not available Vapor pressure: Data not available

250 · C Flash point:

10. Stability and reactivity

Stability: Stable under normal conditions and handling. Possibility of hazardous reaction: Reacts with organic base, strong oxidizing agents.

Prohibitive conditions: Heat

Prohibitive contact: With organic base, oxidizing agent

Hazardous decomposed substances: Generates Aldehyde, Acid and Organic matter by thermal decomposition.

11. Hazard information

Estimation ATE mix=11400mg/kg Acute toxicity, oral

The product, as a mixture, falls in Not Classified

Skin corrosion/irritation The product, as a mixture, falls in Category 2 (Causes skin irritation). Eye damage/irritation The product, as a mixture, falls in Category 2B (Causes eye irritation).

Skin sensitization The product, as a mixture, falls in Category 1(May cause an allergic skin reaction)

12. Ecological information

Hazard to the aquatic environment(Acute hazard):

The product, as a mixture, falls in Category 1(Very toxic to aquatic life)

Hazard to the aquatic environment(Long-term

hazard):

The product, as a mixture, falls in Category 1(Very toxic to aquatic life with long

lasting effects)

Hazard to the ozone layer:

Does not contain any ingredient listed in the Annexes to the Montreal Protocol.

Classification Not Possible.

13. Notes on disposal

Residual & waste: In the disposal of residual and other wastes, observe the relevant laws

/regulations and local government rules.

Users of the product should contract with the local government or licensed

'Industrial Waste Processors' for disposal of waste.

It is important to let the contractor know well of fire and health hazards of the

product, prior to disposal.

Contaminated containers & packages: Clean the containers for reuse or dispose them properly in accordance with

relevant regulations and local government rules. Completely empty containers prior to disposal.

14. Transport information

International rule

UN number: 3077
UN classification: Class 9
Container Grade Ⅲ

Sea Pollution Prevention Act Harmful liquid material

The enforcement order separate table first; X Group (Reaction product of bisphenol A and epichlorohydrin)

However, it is non-corresponded when net weights of one container are less than 5L

Domestic control:

Guidance Number 171

Onshore control info.

Observe the Fire Defense Law.
Offshore control info.

Observe the Marine Vessel Safety Law.

Air cargo control info.

Special safety measure:

Observe the Aviation Law.
Observe the Fire Defense Law.

On-board containers of hazardous material must be piled firmly and orderly to

avoid falling, tumbling and breaking.

Cargo of hazardous material must be transported in a way the containers or the

material itself do not suffer severe friction and vibration.

If possible cause of casualty, such as heavy leakage, is found during

transportation, try to remedy the situation and notify the fact to the nearby fire

department or the relevant bureau.

The driver carrying hazardous material must hold Yellow Card. Do not load hazardous materials together with food and feedstuff.

15. Regulatory information

Labor Safety and Hygiene Law: Hazardous materials to be notified to the authority (Chapter 57, Section 2)

(Titanium Oxide)

Hazardous materials to be posted (Chapter 18 of Ordinance)

(Not applicable)

Mutagenicity chemical substance

Fire Defense Law: Not applicable PRTR Law: Not applicable Poisonous & Deleterious Substance Control Law: Not applicable

Sea Pollution Prevention Act

Harmful liquid material

The enforcement order separate table first; X Group (Reaction product of bisphenol A and epichlorohydrin)

However, it is non-corresponded when net weights of one container are less than 5L

16. Other information Literature:

1) Chemicals Safety Data Sheet (MSDS) Part 1: Content and Order of Items

2) Guideline for MSDS Edition (Revised Edition) by Japan Chem. Ind. Assoc.

3) GHS Classification Database, Site of National Institute of Technology and Evaluation 4) Hazard Handbook of Chemicals by Japan Industrial Safety and Health Association

5) Hazard $\,$ communication of chemicals based on GHS-Labelling and Safety Data Sheet(SDS) JIS Z 7253:2012

This data sheet is edited by referring to currently available information, however, it is not intended to guarantee the data values or the precision of contained information. The precautions mentioned above are for ordinary handling and use only therefore please handle with care by implementing appropriate safety measures for new application and usage.