

SAFETY DATA SHEET

1. Product and company (manufacturer) identification

Product:	Eslotight A
Manufacturer:	Sekisui Chemical Co., Ltd.
Address:	Toranomon 2-10-4, Minato-ku, Tokyo 105-8566
Responsible section:	Urban Infrastructure & Environmental Products Company Pipe Systems Division
Telephone:	+81-3-6748-6492
Urgent telephone:	+81-3-6748-6492
Fax:	+81-3-6748-6564
Urgent contact:	Same as above
Application & restriction	Bonding agent for polyvinyl chloride piping system for sewers. Other applications are prohibited.
Document number:	Es-A

2. Hazards identification

GHS Classification

Physicochemical hazards:	Explosives	Not classified
	Flammable gases	Not classified
	Aerosols	Not classified
	Oxidizing gases	Not classified
	Gases under pressure	Not classified
	Flammable liquids	Not classified
	Flammable solids	Not classified
	Self-active chemicals	Not classified
	Pyrophoric liquids	Not classified
	Pyrophoric solids	Not classified
	Self-heating chemicals	Classification not possible
	Chemicals which, in contact with water, emit flammable gases	Not classified
	Oxidizing liquids	Not classified
	Oxidizing solids	Not classified
	Organic peroxides	Not classified
	Substances corrosive to metals	Classification not possible
	Desensitized explosives	Not classified
Health hazards:	Acute toxicity (oral)	Not classified
	Acute toxicity (dermal)	Classification not possible
	Acute toxicity (inhalation: gas)	Not classified
	Acute toxicity (inhalation: vapor)	Classification not possible
	Acute toxicity (inhalation: dust and mist)	Classification not possible
	Skin corrosion/irritation	Category 2
	Eye damage/irritation	Category 2B
	Respiratory sensitization	Classification not possible
	Skin sensitization	Category 1
	Germ cell mutagenicity	Category 2
	Carcinogenicity	Classification not possible
	Reproductive toxicity	Classification not possible
	Specific target organ toxicity (single exposure)	Classification not possible
	Specific target organ toxicity (repeated exposure)	Classification not possible
	Aspiration hazard	Classification not possible
Environmental hazards:	Hazard to the aquatic	Category 1
	Hazard to the aquatic environment (Long-term hazard)	Category 1
	Hazard to the ozone layer	Classification not possible

Pictogram or symbol:



Signal word:

Warning

Hazard statement:	(H315+H320) Causes skin and eye irritation (H317) May cause an allergic skin reaction (H341) Suspected of causing genetic defects state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard (H410) Very toxic to aquatic life with long lasting effects
Precautionary statement:	Obtain special instructions before use. (P201) Do not handle until all safety precautions have been read and understood. (P202) Avoid breathing dust/fume/gas/mist/vapors/spray. (P261) Wash hands thoroughly after handling. (P264) Contaminated work clothing should not be allowed out of the workplace. (P272) Avoid release to the environment. (P273) Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water. (P302+P352) Specific treatment. (P321) If skin irritation occurs: Get medical advice/attention. (P332+P313) If skin irritation or rash occurs: Get medical advice/attention. (P333+P313) Take off contaminated clothing and wash it before reuse. (P362+P364) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338) If eye irritation persists: Get medical advice/attention. (P337+P313) Collect spillage. (P391) Store locked up. (P405) Dispose of contents/container in accordance with local/regional/national/international regulations. (P501)

3. Composition/information on ingredients

Nature of composition:	Mixture
Chemical or common name:	Liquid epoxy resin
Hazardous ingredients:	Reaction product of bisphenol A and epichlorohydrin, Titanium oxide

Component	Content	CAS Number	Reference Number in Gazetted List in Japan	Others
Reaction product of bisphenol A and epichlorohydrin	35 to 44%	25068-38-6	(7)-1283	
Urethane modified epoxy resin	20 to 30 %	Registered	Registered	
Titanium oxide	1 to 10 %	13463-67-7	(1)-558	
Calcium carbonate	25 to 34 %	471-34-1	(1)-122	

※The content is listed as a range as it is confidential information.

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:	Immediately wipe off and wash the skin with plenty water and soap. Take off the contaminated clothing's for cleaning. Seek physicians counsel if he suffers from irritation or drowsiness.
If gets in eye:	Rinse cautiously with plenty water over 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek physician's counsel.
If swallowed:	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. The use of water can spread the fire and be dangerous.

6. Accidental release measures

Health hazard precaution, protective wear and first-aid 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 rivers, 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 collect in sealed containers.
 For large scale leakage, build bank around the spill and lead the liquid to a safer place for recovery.
 Alternatively, absorb the spillage onto sand, rags, etc. and collect it in a sealed container.

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.
 No open flames.

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 determined

Permissible concentration (Exposure limit, Biological exposure guide line)

Japan society for occupational health. (2005 version) Not determined

ACGIH (2005 version) TLV-TWA Not determined

Protective wears:

Respiratory protection: Use aspirator with appropriate filter

Hand protection: Impermeable gloves

Eye protection: Glasses-type goggles with side plates.

Skin and body protection: Long-sleeve fatigue uniform

Hygienic measures: Wash hands well after handling.

9. Physical and chemical properties

Physical state Viscous liquid

Color White

Odor Characteristic

Melting point/Freezing point No data available

Boiling point or initial boiling point No data available

Flammability No data available

Lower and upper explosion limit/flammability limit No data available

Flash point 250°C

Auto-ignition temperature No data available

Decomposition temperature No data available

pH Not applicable

Dynamic viscosity Not applicable

Solubility Insoluble in water, soluble in common organic solvents

n-octanol/water partition coefficient: No data available

Vapor pressure Not applicable

Density and/or relative density ca. 1.26

Relative vapor density Heavier than air

Particle characteristics No data available

10. Stability and reactivity	
Stability:	Stable under normal conditions and handling.
Chemical stability:	Stable under normal conditions and handling.
Possibility of hazardous reaction:	Reacts with organic base, strong oxidizing agents.
Prohibitive conditions:	Heat
Prohibitive contact:	Oxidizing agent, organic base, etc.
Hazardous decomposed substances:	Generates Aldehyde, Acid and Organic matter by thermal decomposition.
11. Hazard information	
Acute toxicity (oral)	Estimation ATE mix=11400mg/kg
Skin corrosion/irritation	The product, as the mixture, falls in Not classified
Eye damage/irritation	The product, as the mixture, falls in Category 2
Skin sensitization	The product, as the mixture, falls in Category 2B
Germ cell mutagenicity	The product, as the mixture, falls in Category 1B
Carcinogenicity	The product, as the mixture, falls in Category 2
Single toxicity	Classification not possible
Reproductive toxicity	Classification not possible
As a result of the Ministry of Health, Labor and Welfare's toxicity study, mutagenicity tests using micro-organisms and chromosomal aberration tests using mammalian cultured cells showed mutagenicity exceeding the prescribed criteria and may cause health problems.	
12. Ecological information	
Ecotoxicity:	None known at present.
Persistence/degradability:	None known at present.
Ecological accumulative property:	None known at present.
Mobility in soil:	None known at present.
Hazard to the aquatic environment (Acute hazard):	The product, as the mixture, falls in Category 1 (Very toxic to aquatic life)
Hazard to the aquatic environment (Long-term hazard):	The product, as the mixture, falls in Category 1 (Very toxic to aquatic life with long lasting effects)
Hazard to the ozone layer:	Does not contain any ingredients 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
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
UN classification:	Class 9
Packing group:	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 not applicable when net weight in one container is 5L or less.
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.	Observe the Aviation Law.
Special safety measure:	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

(Reaction product of bisphenol A and epichlorohydrin)

Carcinogenicity of chemical substances

(Ordinance on Industrial Safety and Health Chapter 34, Section 2-4)

(Not applicable)

Chemical substances that cause skin and other skin disorders
(related to Article 22 of the Law).

(Reaction product of bisphenol A and epichlorohydrin)

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 not applicable when net weight in one container is 5L or less.

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 7253:2019

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.