Prepared on August 2, 2019

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	Eslon HT Pipe (For hot water supply) : Cutting ships
Chemical product name:	Mixture mainly composed of polyvinyl chloride
Company name:	Sekisui Chemical Co., Ltd.
Address:	75 Nojiri, Ritto, Shiga 520-3081, Japan
Responsible Department:	Urban Infrastructure and Environmental Products Company Shiga-Ritto Plant, Technology Department
Phone:	+81-(0)77-553-4103
Facsimile:	+81-(0)77-553-0783
Recommended use and restriction on use:	For transportation of hot water

2. HAZARDS IDENTIFICATION

Physical and chemical hazards:	Flammable solids	Out of category
	Pyrophoric solids	Out of category
	Substances and mixture which, in contact with water, emit flammable gases	Out of category
Health hazards:	Unclassifiable	
Environment hazards:	Unclassifiable	
GHS label element symbol:	Unclassifiable	
Signal word:	Unclassifiable	
Danger/hazards information:	No data available	
Cautions (Cutting chips):	Avoid inhalation of cutting chips, dust and the like. Wear specified protective equipment. Thoroughly wash hands after handling. Do not eat/drink and smoke at the place where dust generation is observed. Avoid discharge to the environment.	
First aid measures:	IN INHALED, remove the victims to fresh air and keep at rest in a position comfortable for breathing. In the case of exposure or possible exposure, get medical advice. When feeling sick, get medical advice.	
Storage:	Store the product while taking measures to prevent leakage of the cutting chips.	
Disposal:	Dispose by entrusting to a waste disposal contractor who is licensed by local governor.	

3. COMPOSITION/INFORMATION OF INGREDIENTS

Classification of single component or mixture:	Mixture	
Components:		Content
	Chlorinated Polyvinyl chloride	88 - 92%
	Tin compounds	0.5 - 1.5%
	Others	8 - 12%

4. FIRST AID MEASURES

If cutting chips were inhaled:	- Remove the victims to fresh air and keep at rest in a position comfortable for breathing. - Get medical advice, if necessary.
If cutting chips were on skin:	- Wash the skin promptly. - Get medical advice, if necessary.
If cutting chips were in eyes:	- Wash carefully with water for several minutes. - Get medical advice, if necessary.
If cutting chips were swallowed:	- Rinse mouth - Get medical advice, if necessary.

5. FIRE FIGHTING MEASURES

Fire extinguishing media:	- Small fire: Dry chemical powder, carbon dioxide, water - Large Fire: Water, water spraying, normal foam extinguisher
Specific danger/hazards:	- At some kinds of fire, generating poisonous, irritating or corrosive gases.
Specific firefighting method:	- Remove the containers from the fire area if not so dangerous. - In the case of huge fire, use unmanned hose holder or monitor nozzles for firefighting. If such work is not possible, evacuate from the area and let the fire burned out.
Protection of the firefighters:	- During the firefighting work, wear air respirator and chemical protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Cautions for personnel:	When dust is generated by cutting polyvinyl pipes, wear proper protective equipment to prevent exposure to eyes/skin and inhalation. (Refer to the description of "**8. EXPOSURE CONTROL/PERSONAL PROTECTION**")
Cautions to the environment:	Be careful not to cause environmental effect by discharging to the rivers and the like.
Recovery:	When dust is generated by cutting polyvinyl pipes, sweep and recover them into a vacant container, and dispose of them later.
Prevention of secondary disaster:	When dust is generated by cutting polyvinyl pipes, well clean the floor frequently to prevent occurrence of slippery floor surface.

7. HANDLING AND STORAGE

Handling (cutting chips)

Engineering measures: - Take engineering measures described in "**8. EXPOSURE CONTROL/PERSONAL PROTECTION,**" and wear protective equipment.

Local ventilation/general ventilation: - Local ventilation/general ventilation shall be done according to the description of "**8. EXPOSURE CONTROL/PERSONAL PROTECTION**."

Cautions for safe handling:
- Do not inhale or swallow the cutting chips.
- Conduct exhaust ventilation to keep the concentration in air equal to or lower than the exposure limit. (When dust is generated by cutting the pipes.)
- Wash hands well after handling.
- Handle only outdoors or in well ventilated area.
- Avoid discharge to the environment. (When dust is generated by cutting the pipes.)

Avoid contact: - Refer to the description of "**10. STABILITY AND REACTIVITY**."

Storage (cutting chips)

Engineering measures: Keep fire away.

Storage conditions: No specific engineering measure is necessary.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control Concentration:

		Permissible concentration (permissible exposure limit, biological exposure index)	
Tin compound	Control concentration	Japan Society for Ocupational Health (2010 edition)	ACGIH (2010 edition)
	$0.1mg/m^3$ (as Sn)	Not established	TWA $0.1mg/m^3$ (as Sn)

Engineering measures:
- Install eye-washing equipment and safety shower for the work of storing and handling the product. (When dust is generated by cutting the pipes.)
- Handling shall be done in an area with a general ventilation equipment. (When dust is generated by cutting the pipes.)
- When dust is generated in a process of high temperature handling, install ventilation equipment to keep the concentration of air polluting substance equal to or lower than the control concentration permissible exposure limit.

Protective equipment

Respiratory protective equipment:
- Use personal respiratory equipment, if required.
- In the case of insufficient ventilation, wear proper respiratory protective equipment. (When dust is generated by cutting the pipes.)

Hand protective equipment - Wear personnel hand protective equipment, if required.

Eye protective equipment: - Wear personnel eye protective equipment, if required.

Skin and body protective equipment:	- Wear personnel protective clothing and protective face shield, if required.
Hygiene measure:	- Wash hands well after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical property:	Solid
State:	Molded polyvinyl chloride pipes (At cutting, cutting chips and dust are generated.)
Color:	Dark blue-gray
Odor:	No odor
pH:	No data available
Melting point/freezing point:	No data available
Boiling point, initial boiling point and boiling range:	Not applicable
Flash point:	No data available
Combustibility or explosion limit:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Specific gravity (density):	1.48g/cm^3
Solubility:	No data available
n-Octanol/water portion coefficient:	No data available
Spontaneous ignition:	No data available
Odor threshold value:	No data available
Evaporation rate:	No data available
Viscosity:	No data available

10. STABILITY AND REACTIVITY

Stability:	Stable under the normal conditions
Possibility of hazardous reaction:	No information available
Condition to avoid:	No information available
Incompatible hazardous substances:	No information available
Dangerous decomposition product:	Combustion causes generation of carbon monoxide, carbon dioxide, hydrogen chloride and the like.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Oral:	Unclassifiable because of insufficient data
	Dermal:	Unclassifiable because of insufficient data
	Inhalation:	Unclassifiable because of insufficient data
Skin corrosion/irritation:		Unclassifiable because of insufficient data
Serious eye damage/irritation:		Unclassifiable because of insufficient data

Respiratory sensitization:	Unclassifiable because of insufficient data
Skin sensitization:	Unclassifiable because of insufficient data
Germ cell mutagenicity:	Unclassifiable because of insufficient data
Carcinogenicity:	Unclassifiable because of insufficient data
Reproductive toxicity:	Unclassifiable because of insufficient data
Specific target organ systemic toxicity (single exposure):	Unclassifiable because of insufficient data
Specific target organ systemic toxicity (repeated exposure):	Unclassifiable because of insufficient data
Aspiration respiratory hazardous:	Unclassifiable because of no data

12. ECOLOGICAL INFORMATION

Hazardous to aquatic environment (acute):	Unclassifiable because of insufficient data
Hazardous to aquatic environment (chronic):	Unclassifiable because of insufficient data

13. DISPOSAL CONSIDERATION

Residual waste	- At the disposal, comply with related laws and local government standards. - Dispose by entrusting to a waste disposal contractor who is licensed by local governor. - When entrusting the disposal of the waste to a contractor, the danger/hazards should be clearly notified to them in advance.
Contaminated containers and packaging (cutting chips)	Not applicable

14. TRANSPORT INFORMATION

International regulations	Marine transport control:	Non-hazardous material
	Air transport control:	Non-hazardous material
Domestic regulations	Land transport control:	Not applicable
	Marine transport control:	Non-hazardous material
	Air transport control:	Non-hazardous material

Specific safety measurement (cutting chips)	- Keep fire away. - Avoid scattering the cutting chips caused by container damages (the container for cutting chips) and the like.

15. REGULATORY INFORMATION

Industrial Safety and Health Law:	Hazardous substances whose name shall be indicated 8labeled.) (Article 57-2, Enforcement Ordinance Article 18-2, Appended Table 9) (Organic tin compound)
Law for Pollutant Release and	Class 1 designated chemical substance

Transfer Register (PRTR Law):	(Organic tin compound)
Water Pollution Control Law:	Not applicable
Air Pollution Control Law:	Not applicable
Soil Contamination Countermeasure Law:	Not applicable
Waste Disposal and Public Cleansing Law:	Not applicable
Labor Standards Law:	Not applicable

16. OTHER INFORMATION

References: NITE GHS Classification Data Notification
Product MSDSs

Cautions:
- GHS classification is not applicable to Eslon Super Clean Pipe, because they are molded products. However the GHS classification is applied, supposing the fine dust particles are generated during handling like cutting.
- This information can be revised by the new knowledges and test data information.
- The descriptions herein are prepared based on the generally available information and our in-house information, however they do not cover all the information available at present concerning the chemical and technology. Therefore we do not intend to guarantee anything concerning the matter.
- Cautions are for normal handling. For special handling, it is the obligation of each user of the product to provide adequate safety measures suited for applications and usages.