Revised on March 9, 2020

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Eslon Hard Coat DC Plate (Polycarbonate)

PH-4X7-AS, PH-407-ASO, PH-4X7-ASV : Cutting Chips

"X" is one digit number which shows color of product.

Chemical product name: Laminate mainly consisted of Polycarbonate layer

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)77-553-4103Facsimile: +81-(0)77-553-0783Recommended use and Static dissipative sheet

restriction on use:

2. HAZARDS IDENTIFICATION

Physical and chemical Flammable solid hazards: Pyrophoric solid

Substances and mixture which, in contact

with water, emit flammable gases

Health hazards:

Environment hazards:

GHS label element symbol:

Signal word:

Unclassifiable

Unclassifiable

Unclassifiable

Unclassifiable

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

Mixture

component or mixture:

Components: Content

Polycarbonate 99% and more Antimony doped tin oxide 0.01-0.2%

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 - Rinse mouth

swallowed: - 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: - Note that this product generates carbon monoxide, carbon dioxide

and/or irritating gases by incomplete combustion and/or thermal

decomposition.

Specific firefighting method: - Remove the products 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 the products, 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 the products, sweep and recover them

into a vacant container, and dispose of them later.

Prevention of secondary disaster:

When dust is generated by cutting the products, 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

products.)

- 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 products.)

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:

	Control concentration	Permissible concentration (permissible exposure limit, biological exposure index)	
		Japan Society for Occupational Health (2010 edition)	ACGIH (2010 edition)
Tin Compounds	0.1mg/m ³ (as Sn)	-	TWA 0.1mg/m ³ (as Sn)
Antimony Compound	-	-	TWA 0.5mg/m ³ (as Sb)

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 products.)
- Handling shall be done in an area with a general ventilation equipment. (When dust is generated by cutting the products.)
- 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 - Use personal respiratory equipment, if required.

equipment: - In the case of insufficient ventilation, wear proper respiratory protective

equipment. (When dust is generated by cutting the products)

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

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

Skin and body protective - Wear personnel protective clothing and protective face shield, if required.

equipment:

Hygiene measure: - Wash hands well after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical property: Solid

State: Molded sheets (At cutting, cutting chips and dust are generated.)

Color: Designated color

Odor: No odor

pH: No data available

Melting point: Gradually soften around 120°C or higher

Boiling point, initial boiling Not applicable

point and boiling range:

Flash point Above 522°C Combustibility or explosion Not applicable

limit:

Vapor pressure: No data available Vapor density: No data available

Specific gravity (density): 1.20g/cm³

Solubility: No data available n-Octanol/water portion No data available

coefficient:

Spontaneous ignition:
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
No information available

reaction:

Condition to avoid: Protect from excessive heat. Keep away from sources of ignition and heat.

Incompatible hazardous
No information available

substances:

Dangerous decomposition Thermal decomposition or combustion may emit vapors, carbon

product: monoxide, or carbon dioxide

11. TOXICOLOGICAL INFORMATION

Unclassifiable because of insufficient data Acute toxicity Oral:

> 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

Unclassifiable because of insufficient data Germ cell mutagenicity:

Carcinogenicity: Unclassifiable because of insufficient data 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 no data

12. ECOLOGICAL INFORMATION

Aspiration respiratory hazardous:

Hazardous to aquatic Unclassifiable because of insufficient data

environment (acute):

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

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 Not applicable

packaging (cutting chips)

14. TRANSPORT INFORMATION

Non-hazardous material International regulations Marine transport control:

> Non-hazardous material Air transport control:

Domestic regulations Land transport control: Non-hazardous material

Non-hazardous material Marine transport control: Non-hazardous material Air transport control:

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 notified.

(Article 57-2, Enforcement Ordinance Article 18-2, Appended Table 9)

(Tin compound, Antimony compound)

Law for Pollutant Release and

Class 1 designated chemical substance (Antimony compound)

Transfer Register (PRTR Law):

Fire Service Act Designated flammable goods / plastics

Water Pollution Control Law: Not applicable
Air Pollution Control Law: Not applicable
Soil Contamination Not applicable

Waste Disposal and Public

Abandoned plastics in Industrial wastes

Cleansing Law:

Labor Standards Law: Not applicable

16. OTHER INFORMATION

References: NITE GHS Classification Data Notification

Product MSDSs

Cautions: - GHS classification is not applicable to Eslon DC Plate, 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.