Safety Data Sheet

Conforms to JIS Z 7253 : 2019

Preparation date: Nov. 22, 2017
Revision date: Mar. 08, 2022

1. Products and Company Information

Product identifier	AV PIPE GU-N Type (40A~) : Shavings
SDS No.	No.D-031
Supplier name	Asahi Yukizai Corporation
Address	2-5955, Nakanose-cho Nobeoka-city Miyazaki-pref. Japan 882-8688
Phone number	+81-982-35-9380 (CS & Quality Section EHS & CS/QA Department Valve & Piping Systems Division)
Fax number	+81-982-35-9358 (CS & Quality Section EHS & CS/QA Department Valve & Piping Systems Division)
Emergency phone number	+81-982-35-9380
Recommended use and restrictions on use	PVC+FRP composite piping material for high-temperature alkali Electrolysis (caustic soda line)

2. Hazards Identification

GHS classification and label elements of the product

Physical hazards This product is a molded product and is not subject to classification.

Health hazards
Skin corrosion / irritation：Category 2
Serious eye damage / eye irritation：Category 2B
Carcinogenicity：Category 1
Reproductive toxicity：Category 1

Items for which the GHS classification result is "Not applicable to classification" or "Cannot classify" are not listed.

GHS label elements Symbol (GHS JP) —

Signal word (GHS JP) —

Hazard statement (GHS JP)
H315：Causes skin irritation
H320：Causes eye irritation
H350：May cause cancer
H360：May damage fertility or the unborn child

Precautionary statement (GHS JP) (Shavings)

Safety measures
P260：Do not breathe dust.
P264：Wash hands, forearms and face thoroughly after handling.
P270：Do not eat, drink or smoke when using this product.
P273：Avoid release to the environment.
P281：Use personal protective equipment as required.

First-aid measures
P304+P340：If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313：If there is exposure or concern of exposure, get medical advice/attention.

Storage P401：Store not to leak of the Shavings.

Disposal P501：Dispose of contents/container in accordance with local/national regulation.

Summary of significant signs and possible emergencies —

3. Composition / Information on Ingredients

Single or Mixture	Solid mixture
Product name	AV PIPE GU-N Type (40A~)

Component	Concentration or concentration range	Chemical formula	Reference Number in Gazetted List in Japan		CAS No.
			CSCL (Chemical Substances Control Law)	Labor Safety and Health Act	
Polyvinyl chloride (PVC)	60-80%	$(CH_2CHCl)_n$	(6)-66	Che(6)-66	9002-86-2
Lead compounds	≦3%	-	Non-disclosure	Non-disclosure	-
Titanium(IV) oxide	＜1%	TiO_2	(1)-558	Non-disclosure	13463-67-7
Glass Fiber	5-30%	-	-	-	65997-17-3
Other organic/inorganic compounds	≦40%	-	Non-disclosure	Non-disclosure	Non-disclosure

Industrial Safety and Health Act

Hazardous and harmful materials requiring labeling of names, etc.
(Article 57-1 of the Law; Article 18 of the Enforcement Ordinance)
Lead stearate (Legally specified number: 326) (0.1%≦)
Lead and its inorganic compounds
(Legally specified number: 411) (0.1%≦)

Hazardous and harmful materials requiring notification of name etc.
(Article 57-2 of the Law, Enforcement Ordinance, Article 18-2, Schedule 9)
Lead stearate (Legally specified number: 326) (0.1%≦)
Lead and its inorganic compounds
(Legally specified number: 411) (0.1%≦)
Titanium oxide (IV)
(Legally specified number: 191) (≧0.1 and ＜1%)

4. First-aid Measures

Description of first-aid measures

If inhaled (shavings)
Move to a place of fresh air and get rest in an easily breathing posture.
Call a doctor if you feel unwell.

If on skin (shavings)
Promptly remove the shavings.
If you feel unusual, contact a doctor.

If in eyes (shavings)
Carefully wash with water for a few minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If you feel unusual, contact a doctor.

If swallowed (shavings)
Rinse mouth.
Contact a doctor immediately.
Do not force him to vomit.
If you feel unusual, contact a doctor.

Most Important Symptoms
Powder is irritating to the respiratory tract when inhaled in large quantities.
May cause mild respiratory distress with prolonged or repeated exposure.

Protection of first responders
In case of powders, rescuers should wear protective equipment such as protective gloves and glasses.

Special precautions for physicians
None in particular

5. Fire-fighting Measures

Extinguishing media

Suitable extinguishing media
Water, spray water, fire-extinguishing powder, general fire-extinguishing foam, carbon dioxide, sand.

Extinguishing media that should not be used	None in particular
Specific hazards in case of fire	It is self-extinguishing and disappears spontaneously when moved away from the flame. However, when it burns, it produces irritating gases. (The main components of the gas are HCl, CO, and CO_2). [Sourced from] Japan PVC Pipe and Fittings Association, Vinyl Environmental Council
Specific fire extinguishing methods	Prohibit anyone other than related personnel from entering the area around the fire. If possible, move away from the source of the fire and extinguish it from upwind.
Protective equipment for fire-fighters	Wear appropriate protective clothing (heat-resistant) when extinguishing fires.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	If dust is generated by pipe cutting, workers should wear appropriate protective equipment to avoid eye and skin contact and inhalation.

Environmental precautions

Environmental precautions	Be careful not to discharge into rivers, etc., so as not to cause environmental impact. It must not be discharged into the environment.

Containment and remediation methods and equipment

Containment methods	If pipe cutting generates dust, it should be swept up and collected in an empty container for later disposal processing.
Remediation methods and Equipment	Remove the dust by vacuuming or other methods that do not scatter the dust.
Prevention of secondary hazards	If dust is generated by pipe cutting, dispose of it frequently as it may cause slipping hazards if left on the floor.

7. Handling and Storage

Handling (Shavings)

Engineering measures	Implement equipment measures as described in "**8. Exposure controls/Personal protection**" and wear protective equipment. Implement local / general ventilation as described in "**8. Exposure controls/Personal protection.**"
Precautions for safe handling	Handle the product in such a way that no dust is generated. Do not inhale dust. (Cutting dust). Wash hands thoroughly after handling. Use exhaust ventilation to keep airborne concentrations below exposure limits. (If dust is generated by pipe cutting) Use outdoors or in a well-ventilated area. Avoid release to the environment (when dust is generated by pipe cutting).
Contact avoidance	When dust is generated, take measures against static electricity for equipment and devices. See "**10. Stability and Reactivity.**"

Storage (Shavings)

Engineering measures	Store in a cool, dark, well-ventilated place away from direct sunlight and avoid fire.
Safe storage conditions	Paper bags, flexible containers, silos

8. Exposure controls/Personal protection

Control concentration, allowable concentration

Component	Control concentration	Allowable concentration (Japan Society for Occupational Health Version 2013)	Allowable concentration (ACGIH) (Version 2006)
Titanium(IV) oxide	-	Inhalant dust : 1mg/m^3 Total dust : 4mg/m^3	10mg/m^3
Lead compounds (As lead)	0.05 mg/m^3 (As lead)	0.1mg/m^3	0.05mg/m^3
Glass Fiber	3.0 mg/m^3	Inhalant dust : 2mg/m^3 Total dust : 8mg/m^3	-

Permissible concentration [Permissible concentration in case of powder, etc.]

Permissible concentration in case of powder, etc.	Japan Society for Occupational Health Version 2017	Ministry of Health, Labour and Welfare No. 1024-1 (2017.10.24)	ACGIH (Version 2017)：Polyvinyl chloride (Respirable Fraction)
Poly vinyl chloride (vinyl chloride resin)	Class 3 Dust Inhalable dust：2mg/m^3 Total dust：8mg/m^3	Organic and inorganic powdery substances General control guidelines Inhalable dust：2mg/m^3	Inhalable dusts TWA :1mg/m^3

[Working environment measurement] Although these substances are not required by law to be measured in the working environment, efforts should be made to confirm and protect the working environment using working environment measurements and risk assessment tools.

Equipment measures Install local exhaust ventilation in work areas where dust is generated. Install shower, hand washing, and eye washing facilities near the handling area. (If dust is generated by cutting)

Protective equipment

Respiratory protection Use personal respiratory protective equipment where necessary.

Hand protection Use personal hand protective equipment where necessary.

Eye protection Use personal eye protective equipment where necessary.

Skin and body protection Use personal protective clothing and protective face mask as necessary.

Sanitary measures Wash hands thoroughly after handling.

Special precautions None in particular

9. Physical and Chemical Properties

Physical state

Appearance Solid (Pipe) (Cutting debris and dust are generated during cutting)

Color Dark violet

Odor Almost odorless

pH No data available

Flash point No data available

Specific gravity 1.6-1.8 (20 ºC)

Combustion quality Self-extinguishing

Solubility No data available

Spontaneous ignition temperature No data available

10. Stability and Reactivity

Reactivity	It is stable under normal handling.
Chemical stability	It is stable under normal handling.
Possibility of hazardous reactions	When burned, it produces irritating gas (HCl).
Conditions to avoid	No information
Incompatible materials	Keep away from fire.
Hazardous decomposition products	When burned, it produces toxic gases (the main components of the gases are HCl, CO, and CO_2).

11. Toxicological Information

Under a general environment it is a solid pipe showing no hazardous cases.
However, the following items may apply to shavings and fragments that may occur during pipe installation.

Acute toxicity (oral)	Not classifiable due to the lack of data
Acute toxicity (dermal)	Not classifiable due to the lack of data
Acute toxicity (inhalation)	Not classifiable due to the lack of data
Skin corrosion / irritation	Class 2
Serious eye damage / eye irritation	Class 2B
Respiratory sensitization	Not classifiable due to the lack of data
Skin sensitization	Not classifiable due to the lack of data
Germ cell mutagenicity	Not classifiable due to the lack of data
Carcinogenicity	Category 1 since concentration of Carcinogenicity - Category 1 for the ingredients of mixture is not lower than 0.1% the cut-off value.
Reproductive toxicity	Category 1 since concentration of Reproductive toxicity - Category 1 for the ingredients of mixture is not lower than 0.1% the cut-off value.
Toxicity of specific targets (single exposure)	Not classifiable due to the lack of data
Toxicity of specific targets (repeated exposure)	Not classifiable due to the lack of data
Aspiration hazard	If inhaled or aspirated in large quantities as a powder, the following hazards may occur depending on the particle size. Aspirable dusts (Dust collected by a sampler with a granulation characteristic of 50% cut of 100 μm) Dusts that settle in the airways and may cause airway irritation.

12. Environmental Information

Biotoxicity	No information
Residual and degradability	It does not readily decompose in the general environment.
Bioaccumulative	No information
Mobility in the soil	No information
Hazardous to the ozone layer	Not classifiable due to the lack of data
Other	When disposing of the product, follow the instructions in "**13. Disposal Considerations** ".

13. Disposal Considerations

Waste from residues

Follow the related laws and regulations as well as the local government's standards for disposal.

Entrust disposal to an industrial waste disposer licensed by the prefectural governor, or to a local public body, if such a body is in charge of disposal.

When consigning the disposal of waste to a contractor, the contractor should be fully informed of the hazards and harmfulness of the waste.

This product is classified as waste plastic (stable industrial waste).

Reference: Incinerate in an incineration facility with exhaust gas treatment equipment or landfill as non-hazardous waste. (Source: Japan Vinyl Chloride Industry and Environment Association, "Safety Information on Vinyl Chloride Resin")

Contaminated container and package (shavings) Not applicable

14. Transport Information

International regulations

Marine Pollutants No restrictions

Special transport precautions No restrictions

Domestic Regulations

Land Regulations Information No restrictions

Maritime Regulation Information No restrictions

Aviation Regulations Information No restrictions

Safety measures related to transportation or means of transportation

Follow "**7. Handling and Storage** "

15. Regulatory Information (in Japan) (Shavings)

Industrial Safety and Health Low

Working Environment Evaluation Standards (Article 65, Paragraph 1 of the Law)
Hazardous and Harmful Materials Requiring Indication (Article 57-1 of the Law; Article 18 of the Enforcement Ordinance)
Hazardous and Harmful Materials Requiring Notification (Article 57-2 of the Law; Enforcement Ordinance, Article 18-2, Schedule 9)
Lead compounds (Appended Table 4 of the Enforcement Order, Article 1, Item 4 of the Ordinance on the Prevention of Lead Poisoning, Ministry of Labor Notification No. 91 of 1972)

PRTR Law Class 1 specified chemical substance (No. 305 Lead compounds)

Water Pollution Control Law Harmful substances (Article 2 of the Law, Article 2 of the Enforcement Order, Article 1 of the Ministerial Ordinance for Establishing Drainage Standards)

Air Pollution Control Law Substances subject to emission control (hazardous substances) (Article 2, Paragraph 1, Item 3 of the Law, Article 1 of the Cabinet Order)

Waste Management and Public Cleansing Act Industrial waste (classification for disposal as waste)

Soil Contamination Countermeasures Act Specified hazardous substances (Article 2, Paragraph 1 of the Act, Article 1 of the Enforcement Order)

Poisonous and Deleterious Substances Control Act Not applied

Fire Service Act Not applicable or non-hazardous material

Foreign Exchange and Foreign Trade Act Not applied

Ship Safety Act	Not applied
Civil Aeronautics Act	Not applied
Act on Port Regulations	Not applied

16. Other Information

Material Safety Data Sheets are provided to businesses that handle hazardous chemical products as reference information to ensure safe handling. Business operators who handle such products are requested to use this data sheet as a reference, with the understanding that it is necessary to take appropriate measures according to the actual conditions of individual handling, etc., on their own responsibility.

Therefore, this data sheet itself is not a guarantee of safety.

In addition, this information is subject to revision based on new findings.

Information on content, physical/chemical properties, etc. is not a guaranteed value.

The evaluation of hazards and harmfulness is based on materials and data currently available, but is not exhaustive.

If you have a Material Safety Data Sheet for this product that was previously provided to you, please destroy it.

SDSs may be revised due to legal revisions or product improvements. If the SDS was created or revised more than two years ago, please check that it is the latest version.

SDS transmission route : In principle, Safety Data Sheets (SDS) are transmitted to end users through the following route.

If you have not obtained the SDS yet, please contact us through the sales channel to request the SDS or to inquire about the latest version.

(Manufacturer → agency → handling business)

Disclaimer

The information contained in this sheet is based on reliable information, but no warranty, express or implied, is given as to the accuracy of the information. Because the conditions under which the product is handled, used, stored, or disposed of are beyond our control and may not be known to us, we assume no responsibility, direct or indirect, for any loss, damage, or expense resulting from the handling, use, storage, or disposal of the product. This sheet should be used only with this product. If this product is used as an ingredient in other products, the information contained in this sheet may not apply.