## Safety Data Sheet

## 1.Product and company identification D-Proline Product name Name of manufacturer Yoneyama Yakuhin Kogyo Co.,Ltd. 2-3-11 Doshomachi , Chuo-ku, Osaka, 541-0045, Japan Address Contact for Information Sales Division Telephone number 06-6231-3555 Fax number 06-6223-1093 SDS No. 29551 2.Hazards identification GHS Classification Does not meet the classification criteria. GHSLabel Elements Symbol Signal ward Hazard statement 3.Composition/information on ingredients Substance/Mixture Substance Chemical name or commercial name D-Proline Synonyms $C_5H_9NO_2$ Chemical formula CAS RN: 344-25-2 Numerical identifier 100% Ingredients and composition 4.First and measures INHALATION Move the exposed person to fresh air at once. Keep the affected person warm and at rest. SKIN CONTACT Rinse immediately contaminated clothing and skin with plenty of water before removing clothing. If skin irritation occurs: Get medical advice/attention. EYE CONTACT Remove contact lenses, if present and easy to do. Continue rinsing. INGESTION Rinse mouth. 5.Fire fighting measures Suitable extinguishing media spray water, alcohol-resistant foam, powder, carbon dioxide Unsuitable extinguishing media No data Specific hazards arising from chemical No data Particular fire fighting No data Special protective actions for fire-fighters Firefighting should be done upwind and avoid inhalation of toxic fumes. depending on the risk, wear appropriate protective equipment. 6.Accidental release measure Personal precaution, protective equipment and Wear appropriate protective equipment and work from upwind to emergency procedures evacuate people downwind. Wear protective clothing, respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Environmental precautions Be careful not to discharge it into rivers, etc. and cause environmental impact. Removal measure Store the vessels in a well-ventilated location. Entrust them to the appropriate authorities for disposal. No data 7.Handling and storage Handling Technical measures Prevents leakage, overflow, and scattering, and does not generate dust unnecessarily. Precautions for safe handling Do not handle the container by tumbling it, dropping it, giving it an impact, or dragging it. Incompatible materials Provision of very good ventilation in the working area. Hygiene measures Rinse and then wash skin with water and soap. Storage Conditions for safe storage Store in a dry and cool place. Store in a closed container. Keep from sunlight. polyethylene, polypropylene

Packaging compatibilities

- Date of revision: 2021/02/26
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Exposure limits	
ACGIH	_
Equipment measures	Provision of very good ventilation in the working area. Washing facility at the workplace required.
Protective equipment	
Respiratory protection	Air – supplied or self – contained NIOSH approved breathing apparatu
Hand protection	Impervious protective gloves.
Eye protection	Safety goggles.
Skin protection	Protective clothing, protective boots.
).Physical and chemical properties	
Physical state	crystal powder
Appearance	white
Odor	No data
Melting point/Freezing point	220°C (decomposition)
Boiling point	No data
Combustible	No data
Upper/lower explosive limits	No data
Flash point	No data
-	No data
Auto-ignition temperature	220°C
Decomposition temperature	
pH	No data
Viscosity	No data
Solubility	Soluble easily in alcohol. Extraordinarily high solubility in water. 127.2g/100g(0°C water), 155g/100g(20°C water), 188g/100g(40°C water), 228g/100g(60°C water)
Partition coefficient: n-octanol/water	No data
Vapor pressure	No data
Specific gravity	No data
Vapor density	No data
Relative evaporation rate	No data
IO.Stability and reactively	
Reactivity	No data
Chemical stability	Stable under normal handling.
Possibility of hazardous reaction	No data
Condition to avoid	sunlight, high temperature, high humidity
Incompatible materials	strong oxidizing substances
Hazardous decomposition products	nitrogen oxides, carbon monoxide
1.Toxicological information	
Acute toxicity	No data
Skin corrosion/irritation	No data
Eye damage/irritation	No data
	No data
Respiratory sensitization and Skin sensitization	
Germ cell mutagenicity	No data
Carcinogenicity	Not listed (NTP, IARC, OSHA) (Classification not possible)
Reproductive toxicity	No data
Specific target organ toxicity (single exposure)	No data
Specific target organ toxicity(repeated exposure)	No data
Aspiration hazard	No data
2.Ecological information	
Hazardous to the aquatic environment	No data
Persistence and degradability	No data
Bioaccumulative potential	No data
Mobility in soil	No data
Hazardous to the ozone layer	Not enumerated in Montreal Protocol on Substances that Deplete th Ozone Layer.
I3.Disposal considerations	
Residual disposal	If there is no way of recycling it must be disposed of in compliance w
	the respective national and local regulation.

UN Number	_
UN proper shipping name	_
Transport hazard class	_
Packing group	_
Additional identification	Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.
	Before transporting product containers ensure that they are firmly secured. Ensure that the container valve is closed and not leaking. Prevent the product containers from falling over or falling.
15.Regulatory information	
	Please apply to the regulatory control in each country.
16.Other information	
References	National Institute of Technology and Evaluation(NITE)
	Hazardous Substances Data Bank(HSDS)
Attention	The Safety Data Sheet (SDS) is prepared based on JIS Z7253. All information contained herein is given in good faith and no warranty expressed or implied is made to its accuracy. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable.
	However, each user should review these recommendations and determine whether they are appropriate.