

Hayashi Pure Chemical Ind.,Ltd.

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SDS code: O2-17

Version: 04

Safety Data Sheet

1. Chemical product and company identification

Product name SDS code	Polyoxyethylene sorbitan monooleateO2-17
	machi, Chuo-ku, Osaka, Osaka, Japan lanning Group, Reagent & Chemical Product Department pc-j.co.jp
Emergency number	: 06-6910-7305

2. Hazards identification

GHS classification

Physical hazards	Desensitized eplosives	classification not possible
	Explosives	classification not possible
	Flammable gases	No classification
	Aerosol	classification not possible
	Oxidizing gases	No classification
	Gases under pressure	No classification
	Flammable liquids	No classification
	Flammable solids	No classification
	Self-reactive substances and mixtures	classification not possible
	Pyrophoric liquids	classification not possible
	Pyrophoric solids	No classification
	Self-heating substances and mixtures	classification not possible
	Substances and mixtures which in contact with water emit flammable gases	classification not possible
	Oxidizing liquids	classification not possible
	Oxidizing solids	No classification
	Organic peroxides	classification not possible
	Corrosive to metals	classification not possible
Health hazards	Acute toxicity (oral)	classification not possible
	Acute toxicity (dermal)	classification not possible
	Acute toxicity (inhalation:gas)	classification not possible
	Acute toxicity (inhalation:vapors)	classification not possible
	Acute toxicity (inhalation:dust/mist)	classification not possible
	Skin corrosion/irritation	classification not possible
	Serious eye damage/eye irritation	classification not possible
	Respiratory sensitization	classification not possible
	Skin sensitization	classification not possible
	Germ cell mutagenicity	classification not possible
	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	Hazardous to the aquatic environment, short-term (acute)
	Hazardous to the aquatic environment, long-term (chronic)
	Hazardous to the ozone layer

classification not possible

classification not possible

classification not possible

3. Composition/information on ingredients

Distinction of substance or mixture	:	Substance
Synonyms	:	Tween80

News	Concentration or	Fammala	Kanpo	0.10.51	
Name	Concentration range	Formula	CSCL no	ISHL no	CAS RN
Polyoxyethylene sorbitan monooleate (polymerization degree 20 and its mixture)	-	cannot be identified	(8)-55	Existing Chemical Substance	9005-65-6

The above concentration or concentration range are not product specification.

All percentages listed in the above concentration or concentration range are mass%, unless otherwise specified.

4. First aid measures

First aid	measures
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I not all model of		
First-aid measures after inhalation	:	Remove person to fresh air and keep comfortable for breathing.
		Get immediate medical advice/attention.
First-aid measures after skin	:	Remove/Take off immediately all contaminated clothing.
contact		Gently wash with plenty of soap and water.
		Get immediate medical advice/attention.
First-aid measures after eye contact	:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		Get immediate medical advice/attention.
First-aid measures after ingestion	:	Rinse mouth.
		Get immediate medical advice/attention.
5. Fire fighting measures		
Suitable extinguishing media	:	Use proper extinguishing media depending on peripheral fire, Water spray, Carbon dioxide, Dry powder, Sand.
Unsuitable extinguishing media	:	Do not use a heavy water stream.
Hazardous decomposition products in case of fire	:	In case of fire, product may produce irritative or toxic fumes/gases.
· · ·	:	In case of fire, product may produce irritative or toxic fumes/gases. If ignited, for the initial fire-fighting, cut off combustion sources, extinguish fire at a stroke using appropriate fire-extinguishers.

		If unable to be moved containers, sprinkle water to containers and surrounding equipment, etc. to cool.
Protection during firefighting	:	Wear appropriate fire-resistant clothing including self contained- compressed air breathing apparatus.

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures

General measures	:	Wear appropriate personal protective devices to prevent inhalation and contact with eye, skin, and clothing, and never attempt to work on the lee.
Environmental precautions		
Environmental precautions	:	Avoid release to the environment.
		Prevent entry to sewers and public waters.

Methods and Equipment for Containment and Cleaning up

Methods for cleaning up :	:	Clean up any spills as soon as possible, using an absorbent material to collect it.
		Collect leaking and spilled liquid in sealable containers as far as possible.
		Wash out the spilled area with large amounts of water.

7. Handling and storage

Handling	
Technical measures	Work with appropriate personal protective equipment to prevent inhalation or contact to eyes, skin, and clothing.
	Handle with care to prevent leakage, overflowing, or scattering, minimize generation of mist or vapor, and thoroughly ventilate.
Precautions for safe handling	Do not eat, drink or smoke when using this product.
	Thoroughly wash your hands and gargle after handling.
	Ensure good ventilation of the work station.
	Do not contact, breathe or swallow.
Prevents handling of incompatible : substances or mixtures	Avoid prolonged or repeated exposure.
Storage	
Storage conditions	Store in a well-ventilated place, away from direct sunlight. Keep container tightly closed and keep away from fire and heat sources.
Material used in packaging/containers	Light shielding airtight container.
Technical measures	Comply with applicable regulations.
Storage temperature	Cool and dark place

8. Exposure controls / Personal protection equipment

Appropriate engineering controls	: Cover up tightly the generation source at the handling place or install local exhaust equipment or overall ventilation equipment. Install safety showers and eye-fountains near a handling place. Clearly indicate the location.
Protective equipment	
Respiratory protection	: Protective mask
Hand protection	: Impervious protective gloves
Eye protection	: Protective glasses (general glasses, glasses with side-shields, goggles)
Skin and body protection	: Impervious aprons, Impervious work clothing, Protective long boots

9. Physical and chemical properties

Physical state	:	Liquid
Appearance	:	Viscous liquid
Color	:	yellow
Odor	:	characteristic odor
рН	:	6.8 (5% aqueous solution)
Melting point	:	-25 – -23 °C
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	295 °C (Cleveland open cup)
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative density	:	No data available
Density	:	1.08 g/cm ³ (20°C)
Relative gas density	:	No data available
Solubility	:	Soluble in ethanol. Insoluble in n-hexane. Slightly soluble in xylene. Water: 10 % (25°C)

Partition coefficient n- octanol/water (Log Pow)	:	No data available
Explosive limits (vol %)	:	No data available
Viscosity, kinematic	:	No data available
Particle characteristics	:	No data available

10. Stability and reactivity

Reactivity	:	No data available
Chemical stability	:	Stable under normal handling conditions.
Possibility of hazardous reactions	:	May react with strong oxidizing agents.
Conditions to avoid	:	Sunlight, heat. Ignition sources such as flame, spark, and static electricity. Contact with strong oxidizing agents.
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	No data available

11. Toxicological information

The information in this section is based on the "GHS Classification Results" by NITE.

Polyoxyethylene sorbitan monooleate		
Acute toxicity (oral)	No data available	
Acute toxicity (dermal)	No data available	
Acute toxicity (gas)	No data available	
Acute toxicity (vapour)	No data available	
Acute toxicity (inhalation:dust/mist)	No data available	
Skin corrosion/irritation	No data available	
Serious eye damage/irritation	No data available	
Respiratory sensitization	No data available	
Skin sensitization	No data available	
Germ cell mutagenicity	No data available	
Carcinogenicity	No data available	
Reproductive toxicity	No data available	
STOT-single exposure	No data available	
STOT-repeated exposure	No data available	
Aspiration hazard	No data available	

12. Ecological information

The information in this section is based on the "GHS Classification Results" by NITE.

Polyoxyethylene sorbitan monooleate		
Hazardous to Aquatic Environment - Acute Hazard	No data available	
Hazardous to Aquatic Environment - Chronic Hazard	No data available	
Persistence and degradability	No data available	
Bioaccumulative potential	No data available	
Mobility in soil	No data available	
Hazardous to the ozone layer	No data available	

13. Disposal considerations

Ecology - waste materials	:	With the detail information of the waste, subcontract its disposal to a waste disposer authorized by a Prefectural Governor.
Contaminated container and packaging	:	Empty the packaging completely prior to disposal. Empty containers should be taken for recycle, recovery or waste in accordance with local regulation.

14. Transport information

International Regulations

Transport by sea(IMDG)

UN-No. (IMDG) Proper Shipping Name (IMDG) Packing group (IMDG) Transport hazard class(es) (IMDG)	 Not applicable Not applicable Not applicable Not applicable Not applicable
Air transport(IATA)	
UN-No. (IATA) Proper Shipping Name (IATA) Packing group (IATA) Transport hazard class(es) (IATA)	 Not applicable Not applicable Not applicable Not applicable Not applicable
Marine pollutant	: Not applicable
Regulations in Japan Regulatory information by sea Regulatory information by air Special transport precautions	
15. Regulatory information National law	
Industrial Safety and Health Law	: Not applicable
Japanese Poisonous and	Not applicable

Industrial Safety and Health Law	:	Not applicable
Japanese Poisonous and Deleterious Substances Control Law	:	Not applicable
Fire Service Law	:	Designated Combustible Substances - Combustible liquids (Law Art.9-4, Cabinet Order on Hazardous Materials Art.1-12, Attached Table No.4)
Law Relating to Prevention of Marine Pollution and Maritime Disasters	:	Noxious Liquid Substances - Category Y (Law Art.3(3), Enforcement Order, Art.1-2, Attached Table No.1 Item 2)
Foreign Exchange and Foreign Trade Control Act	:	Export Trade Control Ordinance appendix 1-16
Japanese Pollutant Release and Transfer Register Law (PRTR Law)	:	Not applicable

16. Other information

Data sources	:	Handbook of 17120 Chemical Products, The Chemical Daily Co, Ltd. International Chemical Safety Cards. National Institute of Technology and Evaluation (NITE). 2016 Emergency Response Guidebook (ERG 2016).
Other information	:	The SDS is copyrighted material of Hayashi Pure Chemical Ind, Ltd. This Safety Data Sheet is intended to be provided for business operators who handle chemical substance products of the relevant product and is not intended to assure safety in any way. The Safety Data Sheet does not verify all the information on the applicable chemical substance in the present time. With the recognition in that unknown danger constantly exists in the relevant chemical substance, the product shall be used in the principle of self-responsibility of the user with the highest priority to safety from transport and unpacking to disposal. When the relevant chemical substance is used, the user him/herself shall collect safety information and shall investigate laws and regulations at the place, organizations, countries, etc. where the substance is actually used and give the highest priority to them. The Company shall take no responsibility for investigating state and local regulations and the user shall handle this problem on his/her own responsibility. In the event that SDS in Japanese and SDS translated into other languages exist, the document described in Japanese is prior to all other documents whether or not there is any difference in contents, and documents in other languages shall be references.