

Hayashi Pure Chemical Ind.,Ltd.

Date of issue: 7/29/2011 Revision date: 8/19/2020 SDS code: F6-10

Version: 07.1

Safety Data Sheet

1. Chemical product and company identification

Product name SDS code	 Sodium standard solution 1mg Na/mL (1,000ppm) F6-10
	machi, Chuo-ku, Osaka, Osaka, Japan anning Group, Reagent & Chemical Product Department c-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	classification not possible
	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	Category 1
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	Category 1
	Serious eye damage/eye irritation	Category 1
	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)		classification not possible classification not possible
	Hazardous to the	e ozone layer	classification not possible
Hazard pictograms (GHS JP)			
	GHS05		
Signal word (GHS JP)) :	Danger	
Hazard statements (G	iHS JP) :		to metals (H290) in burns and eye damage (H314)
Precautionary stateme	ents (GHS JP)		
Prevention	:	Do not breathe du Wash hands, fore	nal container. (P234) ist/fume/gas/mist/vapors/spray. (P260) arms and face thoroughly after handling. (P264) loves/protective clothing/eye protection/face protection.
Response	:	(P301+P330+P33 IF ON SKIN (or ha Rinse skin with wa IF INHALED: Ren breathing (P304+ IF IN EYES: Rins contact lenses, if (P305+P351+P33 Immediately call a Wash contaminat	air): Take off immediately all contaminated clothing. ater . (P303+P361+P353) nove person to fresh air and keep comfortable for P340) e cautiously with water for several minutes. Remove present and easy to do. Continue rinsing.
Storage	:	Store locked up. (
Disposal	:		ts/container to hazardous or special waste collection ce with local, regional, national and/or international

3. Composition/information on ingredients

Distinction of substance or mixture : Mixture

	Concentration or		Kanpo		
Name	Concentration range	Formula	CSCL no	ISHL no	CAS RN
Sodium chloride	About 0.25%	NaCl	(1)-236	7-(3)-1053	7647-14-5
Hydrogen chloride	About 0.073%	HCI	(1)-215	Existing Chemical Substance	7647-01-0
Water	About 99.677%	H2O	-	-	7732-18-5

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

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	:	Do NOT induce vomiting.
		Drink plenty of water.
		Rinse mouth.
		Get immediate medical advice/attention.

5. Fire fighting measures

Suitable extinguishing media	:	Water spray, Alcohol-resistant foam, Dry powder, Carbon dioxide, Sand.
Unsuitable extinguishing media	:	Do not use a heavy water stream.
Explosion hazard	:	May induce explosion of containers by heating.
Hazardous decomposition products in case of fire	:	In case of fire, product may produce irritative or toxic fumes/gases.
Firefighting instructions	:	If ignited, for the initial fire-fighting, cut off combustion sources, extinguish fire at a stroke using appropriate fire-extinguishers.
		In the case of peripheral fire, quickly remove movable containers to safe places.
		If unable to be moved containers, sprinkle water to containers and surrounding equipment, etc. to cool.
		Avoid (reject) fire-fighting water to enter environment.
		Even after extinguishing fire, thoroughly cool containers by using plenty of water.
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 :	Before entering, ventilate the area.
	Do not let unauthorized persons come close to the area.
	Immediately place the leakage area in isolation, with taking proper distances for all directions.
	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 Contain	ment 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.
	If possible, neutralize with slaked lime, soda ash, etc. before washing out.
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 locked up.
	Store in a well-ventilated place, away from direct sunlight. Keep container tightly closed and keep away from fire and heat sources.
	Store in corrosive resistant container with a resistant inner liner.
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

Hydrogen chloride	
Exposure limits (JSOH)	[Ceiling]2ppm(3.0mg/m3)
Exposure limits (ACGIH)	TWA -,STEL C 2 ppm
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	: Gas mask for acid gases
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

	Γ.	oper mee
Physical state	:	Liquid
Appearance	:	Liquid
Color	:	colorless transparent
Odor	:	Almost odorless
рН	:	1.8 (25°C)
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
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	:	1.02 g/cm³ (20°C)
Relative gas density	:	No data available
Solubility	:	No data available
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 Chemical stability	:	No data available Stable under normal handling conditions.
Possibility of hazardous reactions	:	Reacts with a base. Reacts with oxidants, generate toxic chlorine gas. Generates toxic hydrogen chloride gas when heated. Reacts with many metals, flammable gas (hydrogen) is generated.
Conditions to avoid Incompatible materials	:	Sunlight, heat. Contact with base, oxidizing agent, organic peroxide, metal. Base, Oxidizing agent, Organic peroxide, Metal

Hazardous decomposition : Hydrogen chloride, Chlorine, Hydrogen products

11. Toxicological information

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

As a product	
Acute toxicity (oral)	classification not possible
Acute toxicity (dermal)	classification not possible
Acute toxicity (inhalation)	vapors:classification not possible
	Gases:classification not possible dust, mist:classification not possible
Skin corrosion/irritation	Category 1
Serious eye damage/irritation	Category 1
Respiratory sensitization	classification not possible
Skin sensitization	classification not possible
Germ cell mutagenicity	classification not possible
Carcinogenicity Reproductive toxicity	classification not possible
STOT-single exposure	classification not possible classification not possible
STOT-repeated exposure	classification not possible
Aspiration hazard	classification not possible
Sodium chloride	
Acute toxicity (oral)	classification not possible
Acute toxicity (dermal)	classification not possible
Acute toxicity (gas)	classification not possible
Acute toxicity (vapour)	No classification
Acute toxicity (inhalation:dust/mist)	classification not possible
Skin corrosion/irritation	classification not possible
Serious eye damage/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
STOT-single exposure	classification not possible
STOT-repeated exposure	classification not possible
Aspiration hazard	classification not possible
Hydrogen chloride	·
Acute toxicity (oral)	Category 3
Acute toxicity (dermal)	No classification
Acute toxicity (gas)	Category 3
Acute toxicity (yago)	classification not possible
Acute toxicity (inhalation:dust/mist)	Category 2
Skin corrosion/irritation	Category 1
Serious eye damage/irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	No classification
Germ cell mutagenicity	classification not possible
Carcinogenicity	No classification
Reproductive toxicity	classification not possible
STOT-single exposure	Category 1
STOT-repeated exposure	Category 1
Aspiration hazard	No classification
Water	
Acute toxicity (oral)	No classification
Acute toxicity (dermal)	No classification
Acute toxicity (definal)	No classification
Acute toxicity (gas)	No classification

Water				
Acute toxicity (inhalation:dust/mist)	No classification			
Skin corrosion/irritation	No classification			
Serious eye damage/irritation	No classification			
Respiratory sensitization	No classification			
Skin sensitization	No classification			
Germ cell mutagenicity	No classification			
Carcinogenicity	No classification			
Reproductive toxicity	No classification			
STOT-single exposure	No classification			
STOT-repeated exposure	No classification			
Aspiration hazard	No classification			

12. Ecological information

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

As a product	
Hazardous to the aquatic environment,	classification not possible
short-term (acute)	
Hazardous to the aquatic environment,	classification not possible
long-term (chronic)	
Persistence and degradability	No data available No data available
Bioaccumulative potential Mobility in soil	No data available
Ozone	classification not possible
Sodium chloride	
Hazardous to Aquatic Environment - Acute Hazard	classification not possible
Hazardous to Aquatic Environment - Chronic Hazard	classification not possible
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Hazardous to the ozone layer	classification not possible
Hydrogen chloride	
Hazardous to Aquatic Environment - Acute Hazard	Category 1
Hazardous to Aquatic Environment - Chronic Hazard	No classification
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Hazardous to the ozone layer	classification not possible
Water	
Hazardous to Aquatic Environment - Acute Hazard	No classification
Hazardous to Aquatic Environment - Chronic Hazard	No classification
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Hazardous to the ozone layer	classification not possible
· · · ·	

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

UN-No. (IMDG) Proper Shipping Name (IMDG) Packing group (IMDG) Transport hazard class(es) (IMDG) Hazard labels (IMDG) Class (IMDG)	 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. III 8 8 8 8
Special provision (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) Stowage category (IMDG) Properties and observations (IMDG) MFAG-No	 223, 274 P001, LP01 IBC03 T7 TP1, TP28 A Causes burns to skin, eyes and mucous membranes. 154
Air transport(IATA)	
UN-No. (IATA) Proper Shipping Name (IATA) Packing group (IATA) Transport hazard class(es) (IATA) Hazard labels (IATA) Class (IATA)	 3264 Corrosive liquid, acidic, inorganic, n.o.s. III 8 8 8 8
PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) Special provision (IATA) ERG code (IATA)	 E1 Y841 1L 852 5L 856 60L A3, A803 8L
Marine pollutant	: Not applicable
Regulations in Japan	
Regulatory information by sea	: Conform to the provisions of the Ship Safety Law.
Regulatory information by air MFAG-No	 Conform to the provisions of the Civil Aeronautics Law. 154
MFAG-No	154When transporting, load containers so that they do not tip over,
MFAG-No Special transport precautions	154When transporting, load containers so that they do not tip over,
MFAG-No Special transport precautions 15. Regulatory information	154When transporting, load containers so that they do not tip over,
MFAG-No Special transport precautions 15. Regulatory information National law	 154 When transporting, load containers so that they do not tip over, damage, drop or collapse. Make sure there is no leak in containers. Corrosive Liquids (Ordinance on Industrial Safety and Health Law Art. 326) Substances on dental health checkup (Act, Art.66, Para.3,
MFAG-No Special transport precautions 15. Regulatory information National law Industrial Safety and Health Law Japanese Poisonous and	 154 When transporting, load containers so that they do not tip over, damage, drop or collapse. Make sure there is no leak in containers. Corrosive Liquids (Ordinance on Industrial Safety and Health Law Art. 326) Substances on dental health checkup (Act, Art.66, Para.3, Enforcement Order, Art.22 Item 3)
MFAG-No Special transport precautions 15. Regulatory information National law Industrial Safety and Health Law Japanese Poisonous and Deleterious Substances Control Law	 154 When transporting, load containers so that they do not tip over, damage, drop or collapse. Make sure there is no leak in containers. Corrosive Liquids (Ordinance on Industrial Safety and Health Law Art. 326) Substances on dental health checkup (Act, Art.66, Para.3, Enforcement Order, Art.22 Item 3) Not applicable Designated Chemical Substances (Law Article 2, Paragraph 4,
MFAG-No Special transport precautions 15. Regulatory information National law Industrial Safety and Health Law Japanese Poisonous and Deleterious Substances Control Law Water Pollution Prevention Law Fire Service Law Air Pollution Control Law	 154 When transporting, load containers so that they do not tip over, damage, drop or collapse. Make sure there is no leak in containers. Corrosive Liquids (Ordinance on Industrial Safety and Health Law Art. 326) Substances on dental health checkup (Act, Art.66, Para.3, Enforcement Order, Art.22 Item 3) Not applicable Designated Chemical Substances (Law Article 2, Paragraph 4, Enforcement Order Article 3-3) Not applicable Emission Control Substances (Hazardous Substances) (Law Art.1 Para 1-3, Enforcement Order Art. 1) Specified Substances (Law Art.17 Para.1, Enforcement Order Art. 10)
MFAG-No Special transport precautions 15. Regulatory information National law Industrial Safety and Health Law Japanese Poisonous and Deleterious Substances Control Law Water Pollution Prevention Law Fire Service Law	 154 When transporting, load containers so that they do not tip over, damage, drop or collapse. Make sure there is no leak in containers. Corrosive Liquids (Ordinance on Industrial Safety and Health Law Art. 326) Substances on dental health checkup (Act, Art.66, Para.3, Enforcement Order, Art.22 Item 3) Not applicable Designated Chemical Substances (Law Article 2, Paragraph 4, Enforcement Order Article 3-3) Not applicable Emission Control Substances (Hazardous Substances) (Law Art.1 Para 1-3, Enforcement Order Art. 1)
MFAG-No Special transport precautions 15. Regulatory information National law Industrial Safety and Health Law Japanese Poisonous and Deleterious Substances Control Law Water Pollution Prevention Law Fire Service Law Air Pollution Control Law	 154 When transporting, load containers so that they do not tip over, damage, drop or collapse. Make sure there is no leak in containers. Corrosive Liquids (Ordinance on Industrial Safety and Health Law Art. 326) Substances on dental health checkup (Act, Art.66, Para.3, Enforcement Order, Art.22 Item 3) Not applicable Designated Chemical Substances (Law Article 2, Paragraph 4, Enforcement Order Article 3-3) Not applicable Emission Control Substances (Hazardous Substances) (Law Art.1 Para 1-3, Enforcement Order Art. 1) Specified Substances (Law Art.17 Para.1, Enforcement Order Art. 10)

Port Regulation Law	:	Corrosive substances (Article 21, Paragraph 2 of Law, Article 12 rule, notice attached table that defines the type of dangerous goods)
Waste Management on Public Cleansing Law	:	Specially Controlled Industrial Wastes (Act Art.2, para 5, Enfothment Order Art.2-4)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)	:	Not applicable
Labor Standards Act	:	Chemical Substances Causing Occupational Illnesses (Act Art.75, Para.2, Ordinance Attached Table 1-2, Item 4-1,MHLW Nortification No.36 of 1978
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.