



SAFETY DATA SHEET

According to JIS Z 7253:2019 **Revision date** 27-Jan-2023 Revision Number 1.02

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Amino Acids Mixture Standard Solution, Type H
Product Code	018-27881
Manufacturer	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan
Supplier	Phone: +81-6-6203-3741 Fax: +81-6-6203-5964 FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741
Emergency telephone number Recommended uses and restrictions on use	Fax: +81-6-6203-2029 +81-6-6203-3741 / +81-3-3270-8571 For research use only
	Section 2: HAZARDS IDENTIFICATION
GHS classification Classification of the substance o Not a hazardous substance or mixtu	<u>r mixture</u> ure according to the Globally Harmonized System (GHS)
Pictograms Signal word	None
Hazard statements Not a hazardous substance or r	nixture according to the Globally Harmonized System (GHS)
Precautionary statements-(Preve • Not applicable	ntion)
Precautionary statements-(Response) • Not applicable	
Precautionary statements-(Storage • Not applicable	ge)

Precautionary statements-(Disposal)

Not applicable

Others Other hazards

Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Mixture

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Water	99	18.02	N/A	N/A	7732-18-5
Hydrochloric Acid	0.0365	36.46	(1)-215	*	7647-01-0
L-Tyrosine	0.0045	181.19	(9)-1596	*	60-18-4
L(+)-Arginine	0.0044	174.20	(2)-1307	*	74-79-3
L(-)-Phenylalanine	0.0041	165.19	(9)-1283	4-(4)-82	63-91-2

		455.45	(0) (00-	*	
L-Histidine	0.0039	155.15	(9)-1607	*	71-00-1
L-Methionine	0.0037	149.21	(2)-1254	*	63-68-3
L-Glutamic Acid	0.0037	147.13	(9)-1573	*	56-86-0
L(+)-Lysine	0.0037	146.19	(9)-1633	2-(4)-172,2-(4)-582	56-87-1
L-Aspartic Acid	0.0033	133.10	(2)-1305	*	56-84-8
L(+)-Isoleucine	0.0033	131.17	(9)-1560	2-(4)-599,2-(4)-611	73-32-5
L-Leucine	0.0033	131.17	(9)-1632	*	61-90-5
L-Cystine	0.0031	240.30	(9)-1587,(2)-1468	2-(12)-135	56-89-3
L(-)-Threonine	0.0030	119.12	(9)-1584	2-(4)-598,2-(4)-688	72-19-5
L-Valine	0.0029	117.15	(9)-1604	*	72-18-4
L(-)-Proline	0.0029	115.13	9-1626	*	147-85-3
L-Serine	0.0026	105.09	(9)-1585	*	56-45-1
L-Alanine	0.0022	89.09	(9)-1553	*	56-41-7
Glycine	0.0019	75.07	(9)-77	*	56-40-6
Ammonium chloride	0.0013	53.49	(1)-218	*	12125-02-9

Note on ISHL No .:

* in the table means announced chemical substances.

Not applicable

Impurities and/or Additives:

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment **Unsuitable extinguishing media**

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for

fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

To cut with care and wear protective gloves and protective goggles to ampoule time of the opening (Cutting method to check the label). Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle In places other than those specified, should not be smoking or eating and drinking Should not be brought contaminated protective equipment and gloves to rest stops Deny unnecessary entry of non-emergency personnel to the handling area

Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage

Safe storage conditions	
Storage conditions	Keep container protect from light tightly closed. Store in a cool (2-10 °C) place.
Safe packaging material	Ampoule
Incompatible substances	Strong oxidizing agents
-	

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Personal protective equipment

Respiratory protection
Hand protection
Eye protection
Skin and body protectionProtective mask
Protection gloves
protective eyeglasses or chemical safety goggles
Long-sleeved work clothesGeneral hygiene considerationsProtective mask
Protection gloves
protective eyeglasses or chemical safety goggles

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form	
Color	colorless
Turbidity	clear
Appearance	liquid
Odor	no data available
Melting point/freezing point	no data available
Boiling point, initial boiling point and boiling range	no data available
Flammability	no data available
Evaporation rate:	no data available
Flammability (solid, gas):	no data available
Upper/lower flammability or	
explosive limits	
Upper:	no data available

- Lower: Flash point Auto-ignition temperature: Decomposition temperature: pH Viscosity (coefficient of viscosity) Dynamic viscosity Solubilities n-Octanol/water partition coefficient:(log Pow) Vapour pressure Specific Gravity / Relative density Vapour density Particle characteristics
- no data available no data available

Section 10: STABILITY AND REACTIVITY

Stability

 Reactivity
 no data available

 Chemical stability
 May be altered by light.

 Hazardous reactions
 None under normal processing

 Conditions to avoid
 Extremes of temperature and direct sunlight

 Incompatible materials
 Strong oxidizing agents

 Hazardous decomposition products
 Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

Skin irritation/corrosion	no data available
Serious eye damage/ irritation	no data available
Respiratory or skin sensitization	no data available
Reproductive 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

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

No information available

Other data

no data available

Persistence and degradability Bioaccumulative potential Mobility in soil Hazard to the ozone layer

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group Marine pollutant	Not regulated - Not applicable
IMDG	Not regulated
UN number	-
Proper shipping name:	
UN classfication	
Subsidiary hazard class	
Packing group Marine pollutant (Sea)	Not applicable
Transport in bulk according to	
Annex II of MARPOL 73/78 and	
the IBC Code	
ΙΑΤΑ	Not regulated
UN number	-
Proper shipping name:	
UN classfication	
Subsidiary hazard class Packing group	
Environmentally Hazardous	Not applicable
Substance	

Section 15: REGULATORY INFORMATION

International Inventories EINECS/ELINCS TSCA	
Japanese regulations	
Fire Service Act	Not applicable
Poisonous and Deleterious	Not applicable
Substances Control Law	
Industrial Safety and Health Ac	tNot applicable
Regulations for the carriage	Not applicable
and storage of dangerous	
goods in ship	
Civil Aeronautics Law	Not applicable
Pollutant Release and Transfer	Not applicable
Register Law	
(~2023.3.31)	
Pollutant Release and Transfer	Not applicable
<u>Register Law</u> (2023/4/1~)	
Water Pollution Control Act	Harmful Substances (Law Art.2, Enforcement Order Art.2, Ordinace Designating
	Wastewater Standards Art.1) Specified substances(Law Art.2 Para.4, Enforcement
	Order Art.3-3)
Export Trade Control Order	Not applicable
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Section 16: OTHER INFORMATION

Key literature references and sources for data etc.	NITE: National Institute of Technology and Evaluation (JAPAN) http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS Dictionary of Synthetic Oraganic Chemistry, SSOCJ, Koudansha Scientific Co.Ltd. Chemical Dictionary, Kyouritsu Publishing Co., Ltd.
	etc

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet