

# SAFETY DATA SHEET

### 1. Identification

Product identifier

Mamu-A\*90120-5 SIV gag Tetramer-SSVDEQIQW-APC

Other means of identification			
Product code	TS-M901-2		
Recommended use	Research use only.		
<b>Recommended restrictions</b>	None known.		
Manufacturer / Importer / Sup	plier / Distributor information		
Manufacturer and	Medical & Biological Laboratories (MBL) Co., Ltd.		
Supplier (Asia)	4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, Japan		
Telephone number	+81-52-238-1901 (Monday to Friday, 9 AM to 5 PM JST)		
Fax	+81-52-238-1440		
E-mail	sds-support@mbl.co.jp		
URL	http://www.mbl.co.jp/e/index.html		
Contact person	SDS Support		
Supplier	MBL International Corporation		
	15A Constitution Way, Woburn, MA 01801, USA		
Telephone number	+1-800-200-5459, option 3		
Fax	+1-781-939-6963		
E-mail	tech@mblintl.com		
URL	http://www.mblintl.com/		
Contact person	Technical Service		

#### 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA hazard(s)	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise	None.
classified (HNOC)	
Supplemental information	None.

### 3. Composition/Information on ingredients

Mixtures

Chemical name	CAS number	%	
Sodium azide	26628-22-8	< 0.1	
Composition comments	All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.		

#### 4. First-aid measures

Inhalation

Move to fresh air. Get medical attention if any discomfort continues.

Skin contact	Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation develops or persists.
Eye contact	Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops or persists.
Ingestion	Rinse mouth thoroughly. Get medical attention if any discomfort occurs.
Most important symptoms/ effects, acute and delayed	Dry skin.
Indication of immediate medical attention and specia treatment needed	Treat symptomatically.
General information	Get medical attention if any discomfort develops.

#### 5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials. None known.	
Specific hazards arising from the chemical	None known.	
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.	
Fire-fighting equipment/ instructions	Move containers from fire area if you can do it without risk. Use water spray to cool unopened containers. Prevent entry to sewers and public waters.	
General fire hazards	The product is non-combustible.	
6. Accidental release measures		
Personal precautions, protective equipment and emergency procedures	Avoid inhalation of mist and contact with skin and eyes. For personal protection, see Section 8 of the SDS.	

Methods and materials for<br/>containment and cleaning upAbsorb spillage with suitable absorbent material. After removal, flush contaminated area<br/>thoroughly with water. For waste disposal, see Section 13 of the SDS.Environmental precautionsPrevent further leakage or spillage if safe to do so.

### 7. Handling and storage

Precautions for safe handlingAvoid contact with eyes and prolonged skin contact. Wash hands after handling. Observe<br/>good industrial hygiene practices.Conditions for safe storage,Keep container tightly closed. Store away from incompatible materials.

## incompatibilities

including any

#### 8. Exposure controls/personal protection

#### **Occupational exposure limits**

Components	Туре	Value	
Sodium azide (CAS 26628-22-8)	Ceiling	0.29 mg/m3	
		0.11 ppm	

#### US NIOSH Pocket Guide to Chemical Hazards: Ceiling Limit Value and Time Period (if specified)

Components	Туре	Value	
Sodium azide (CAS 26628-22-8)	Ceiling	0.3 mg/m3	
		0.1 ppm	

Provide adequate ventilation. Provide easy access to water supply and eye wash facilities.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Individual protection measures, such as personal protective equipment

**Eye/face protection** Risk of splashes: Wear safety glasses with side shields.

Skin protection

Hand protection	Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.
Other	Wear appropriate clothing to prevent repeated or prolonged skin contact.
<b>Respiratory protection</b>	No special precautions. Seek advice from local supervisor.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

	n proportioo
Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Colorless.
Odor	Odorless.
Odor threshold	Not available.
рН	Neutral.
Melting point/freezing point	Not available.
Initial boiling point and	Not available.
boiling range	
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or e	xplosive limits
Flammability limit	Not available.
- lower (%)	
Flammability limit	Not available.
- upper (%)	
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Soluble in water.
Partition coefficient	Not available.
(n-octanol/water)	
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Decomposition temperature	not available.

# 10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Sodium azide: Reacts with copper, lead, silver, mercury and carbon disulfide to form particularly shock-sensitive compounds. Reacts with acids, forming toxic and explosive hydrogen azide.
Conditions to avoid	None known.
Incompatible materials	Heavy metals. Acids.
Hazardous decomposition products	None known.

# 11. Toxicological information Information on likely routes of expos

Information on likely routes of	exposure
Ingestion	Large quantities: May cause discomfort if swallowed.
Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	Direct contact with eyes may cause temporary irritation.

Symptoms related to the	Dry skin.		
physical, chemical and			
toxicological characteristics			
Information on toxicological e	effects		
Acute toxicity	Large quantities: May cause discomfort if swallowed.		
Skin corrosion/irritation	May cause mild skin irritation.		
Serious eye damage/eye	May cause eye irritation.		
irritation			
Respiratory sensitization	Based on available data, the classification criteria are not met.		
Skin sensitization	Based on available data, the classification criteria are not met.		
Germ cell mutagenicity	No data available.		
Carcinogenicity			
	all Evaluation of Carcinogenicity Not listed.		
NTP Report on Carcinog			
	ated Substances (29 CFR 1910.1001-1050) Not listed.		
Reproductive toxicity	No data available.		
Specific target organ toxicity			
- single exposure			
Specific target organ toxicity	No data available.		
- repeated exposure			
Aspiration hazard	Based on available data, the classification criteria are not met.		
Chronic effects	Prolonged inhalation may be harmful.		
12. Ecological information			
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude		
-	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the		
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment.		
Ecotoxicity Persistence and degradability	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment.		
Ecotoxicity Persistence and degradability Bioaccumulative potential	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects 13. Disposal consideration	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited. <b>Ons</b> Dispose of in accordance with all applicable regulations. Do not discharge into drains, water		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects 13. Disposal consideration Disposal instructions	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited. <b>Ons</b> Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects <b>13. Disposal considerati</b> Disposal instructions Local disposal regulations	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited. <b>Ons</b> Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground. Dispose of in accordance with local regulations.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects 13. Disposal considerations Disposal instructions Local disposal regulations Hazardous waste code	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited. <b>Ons</b> Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground. Dispose of in accordance with local regulations. Not regulated.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects <b>13. Disposal considerati</b> Disposal instructions Local disposal regulations Hazardous waste code Waste from residues / unused	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited. <b>Ons</b> Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground. Dispose of in accordance with local regulations.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects 13. Disposal considerations Disposal instructions Local disposal regulations Hazardous waste code	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited. <b>Ons</b> Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground. Dispose of in accordance with local regulations. Not regulated.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects <b>13. Disposal considerati</b> Disposal instructions Local disposal regulations Hazardous waste code Waste from residues / unused products Contaminated packaging	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited. <b>Ons</b> Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground. Dispose of in accordance with local regulations. Not regulated. Dispose of in accordance with local regulations. Dispose of in accordance with local regulations.		
Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil Mobility in general Other adverse effects <b>13. Disposal considerati</b> Disposal instructions Local disposal regulations Hazardous waste code Waste from residues / unused products	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills have a harmful or damaging effect on the environment. No data available. No data available. No data available. The product is water soluble and may spread in water systems. The environmental hazard of the product is considered to be limited. <b>Ons</b> Dispose of in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground. Dispose of in accordance with local regulations. Not regulated. Dispose of in accordance with local regulations. Dispose of in accordance with local regulations.		

DOT	Not regulated as dangerous goods.
ΙΑΤΑ	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transport in bulk according	Not applicable.
to Annex II of MARPOL 73/78	
and the IBC Code	

#### 15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)Not regulated.OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)Not listed.CERCLA Hazardous Substance List (40 CFR 302.4)Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories		Immediate Hazard - No Delayed Hazard - No Fire Hazard - No
		Pressure Hazard - No
		Reactivity Hazard - No
SARA 302 Extremely haz		No
SARA 311/312 Hazardous chemical		No
SARA 313 (TRI reporting)		Not regulated.
Other federal regulations		
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List		Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)		Not regulated.
Safe Drinking Water Act (SDWA)		Not regulated.
Food and Drug Administ	ration (FDA)	Not regulated.
US state regulations	This product does not contain a chemical known to the State o birth defects or other reproductive harm.	f California to cause cancer,
Massachusetts RTK - Su	bstance List	Not listed.
New Jersey Worker and Community Right-to-Know Act		Not listed.
Pennsylvania RTK - Hazardous Substances		Not listed.
Rhode Island RTK		Not listed.
California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT)		Not listed.
International Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	EC Inventory	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (F	PICCS) Yes
United States & Puerto	Toxic Substances Control Act (TSCA) Inventory	Yes
Rico		
*A "Ves" indicates this pro	duct complies with the inventory requirements administered by th	e governing country(s)

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

#### 16. Other information

Issue date	09/25/2012
Revision date	09/30/2016
Version	10
Further information	Not available.
References	Registry of Toxic Effects of Chemical Substances (RTECS) HSDB® - Hazardous Substances Data Bank
Disclaimer	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.