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SAFETY DATA SHEET

1. Identification

Product identifier Annexin V-Biotin

Other means of identification

Product code 4695-100

Recommended use Research use only.

Recommended restrictions None known.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer andMedical & Biological Laboratories (MBL) Co., Ltd.Supplier (Asia)4-5-3 Sakae, Naka-ku, Nagoya, Aichi 460-0008, JapanTelephone 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 symbolNone.Signal wordNone.Hazard statementNone.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

classified (HNOC)

None.

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.

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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 special treatment needed

Treat symptomatically.

General information Get medical attention if any discomfort develops.

5. Fire-fighting measures

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

None known.

media

Specific hazards arising from None known.

the chemical

Special protective equipment Self-contained breathing apparatus, operated in positive pressure mode and full protective

and precautions for

firefighters

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 containment and cleaning up **Environmental precautions**

Absorb spillage with suitable absorbent material. After removal, flush contaminated area

thoroughly with water. For waste disposal, see Section 13 of the SDS.

Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling Avoid contact with eyes and prolonged skin contact. Wash hands after handling. Observe

good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities Keep container tightly closed. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

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

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

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

controls

Individual protection measures, such as personal protective equipment

Eye/face protection Skin protection

Hand protection

Risk of splashes: Wear safety glasses with side shields.

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.

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Other Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protectionNo special precautions. Seek advice from local supervisor. **Thermal hazards**Wear appropriate thermal protective clothing, when necessary.

General hygieneConsiderations
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

Appearance

Physical state Liquid.
Form Liquid.
Color Colorless.
Odor Odorless.
Odor threshold Not available.
PH 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 explosive limits
Flammability limit Not available.

- lower (%)

Flammability limit Not available.

- upper (%)

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.Solubility(ies)Soluble in water.Partition coefficientNot available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

10. Stability and reactivity

ReactivityThe product is stable and non reactive under normal conditions of use, storage and

Chemical stability Stable at normal conditions.

Possibility of hazardous Sodium azide: Reacts with copper, lead, silver, mercury and carbon disulfide to form

reactions 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 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.

Dry skin.

Skin contact Prolonged contact may cause dryness of the skin. **Eye contact** Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

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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 sensitizationBased 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

IARC Monographs. Overall Evaluation of CarcinogenicityNot listed.NTP Report on CarcinogensNot listed.OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)Not listed.

Reproductive toxicity No data available. Specific target organ toxicity No data available.

- 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 possibility that large or frequent spills have a harmful or damaging effect on the

environment.

Persistence and degradability No data available.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in generalThe product is water soluble and may spread in water systems.Other adverse effectsThe environmental hazard of the product is considered to be limited.

13. Disposal considerations

Disposal instructions Dispose of in accordance with all applicable regulations. Do not discharge into drains, water

courses or onto the ground.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused Dispose of in accordance with local regulations.

products

Contaminated packaging Dispose of in same manner as unused product.

14. Transport information

DOT Not regulated as dangerous goods.

IATA 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)

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance 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

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Safe Drinking Water Act (SDWA)

Food and Drug Administration (FDA)

Not regulated.

Not regulated.

Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer,

birth defects or other reproductive harm.

Massachusetts RTK - Substance ListNot listed.New Jersey Worker and Community Right-to-Know ActNot listed.Pennsylvania RTK - Hazardous SubstancesNot listed.Rhode Island RTKNot 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 (PIC	CCS) Yes
United States & Puerto	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}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

Rico

 Issue date
 01/30/2016

 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.