Arginase-1 (SP156) PAb

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Commercial Product Name	:	Arginase-1 (SP156) PAb
Mat.-No./ Genisys-No.	:	06732348001

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended restrictions on use	:	For professional users only.

1.3 Details of the supplier of the safety data sheet

Company	:	Ventana Medical Systems 1910 E. Innovation Park Drive 85755 Tucson AZ	
E-mail address	:		
Telephone	:	1-800-227-2155 or 520-877-2155	
Telefax	:		
Responsible Department	:		
In case of emergencies:	:	CHEMTREC	1-800-424-9300 (U.S. or Canada) 1-703-527-3887 (International)
	:		

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Harmful	R22: Harmful if swallowed.
Dangerous for the environment	R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements	:	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
sodium azide	26628-22-8 247-852-1	T+; R28 R32 N; R50-R53	Acute Tox. 2; H300 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 0.25 - < 1

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice : Do not leave the victim unattended.

If inhaled : Move to fresh air.

: If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

In case of eye contact : Remove contact lenses.
Protect unharmed eye.
If eye irritation persists, consult a specialist.

If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	:	No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	:	The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters	:	Wear self contained breathing apparatus for fire fighting if necessary.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions	:	Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	:	Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Further information on storage conditions	:	See label, package insert or internal guidelines

7.3 Specific end use(s)

Specific use(s)	:	Laboratory chemicals

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Contains no substances with occupational exposure limit values.

Eye protection	:	Safety glasses
Hand protection	:	Protective gloves The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us.Please observe

		the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Skin and body protection	:	Protective suit
Respiratory protection	:	No personal respiratory protective equipment normally required.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
pH	:	7.3 - 7.7
Melting point/range	:	no data available
Boiling point/boiling range	:	no data available
Flash point	:	not applicable
Flammability (solid, gas)	:	The product is not flammable.
Lower explosion limit	:	no data available
Upper explosion limit	:	no data available
Vapour pressure	:	no data available
Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	no data available
Ignition temperature	:	no data available
Thermal decomposition	:	no data available
Viscosity, dynamic	:	no data available

9.2 Other information

Conductivity	:	no data available
Oxidising potential	:	no data available
Surface tension	:	no data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	Further information: Stable under recommended storage conditions., No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid	:	no data available

10.5 Incompatible materials

Materials to avoid	:	no data available

10.6 Hazardous decomposition products

Hazardous decomposition products	:	no data available

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product

Acute oral toxicity	:	no data available
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available
Acute toxicity (other routes of administration)	:	no data available
Aspiration toxicity	:	no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product:

Toxicity to fish	:	no data available

Toxicity to daphnia and other aquatic invertebrates	:	no data available
Toxicity to algae	:	no data available
Toxicity to bacteria	:	no data available

Ecotoxicology Assessment

Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available

12.2 Persistence and degradability

Product:

Biodegradability	:	no data available

12.3 Bioaccumulative potential

Product:

Bioaccumulation	:	no data available

12.4 Mobility in soil

Product:

Mobility	:	no data available
Distribution among environmental compartments	:	no data available
Environmental fate and pathways	:	no data available
Physico-chemical removability	:	no data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Product:

Biochemical Oxygen Demand (BOD)	:	no data available
Dissolved organic carbon (DOC)	:	no data available
Chemical Oxygen Demand	:	no data available

(COD)

Adsorbed organic bound halogens (AOX) : no data available

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Can be disposed as waste water, when in compliance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

DOT
Not dangerous goods

IATA
Not dangerous goods

IMDG
Not dangerous goods

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : No OSHA Hazards

WHMIS Classification : Not Rated

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

CERCLA Reportable Quantity

Components : sodium azide 1000 lbs

SARA 302 Reportable Quantity

Product : Calculated RQ exceeds reasonably attainable upper limit.

Components : sodium azide

SARA 311/312 Hazards : No SARA Hazards

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:

Components : sodium azide

SARA 304 : Calculated RQ exceeds reasonably attainable upper limit.

Components : sodium azide

Clean Air Act

Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

US State Regulations

Massachusetts Right To Know

Components	:	sodium azide	0.1 - 1 %

Pennsylvania Right To Know

Components	:	water	70 - 90 %
		Albumins, blood serum	5 - 10 %

	2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	1 - 5 %
	sodium azide	0.1 - 1 %

New Jersey Right To Know

Components	:	water	70 - 90 %
		Albumins, blood serum	5 - 10 %
		2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	1 - 5 %
		sodium chloride	1 - 5 %

California Prop 65 Components : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R22	Harmful if swallowed.
R28	Very toxic if swallowed.
R32	Contact with acids liberates very toxic gas.
R50	Very toxic to aquatic organisms.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H300	Fatal if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further information

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, use, processing, storage, transportation, disposal and release 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.

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