MATERIAL SAFETY DATA SHEET

Azide Dextrose Agar

Date of Issue: 12/25/2023

Material Safety Data sheet

Section 1: Product and Company Information			
Product Name	Azide Dextrose Agar		
Catalogue Number	i23629	T 1 1 Db	0098 21 66787291
		Technical Phone	09391003565
E-mail	ibresco@gmail.com Fax No 0098 2633523460		0098 2633523460
Company Address	Zist Kavosh Iranian, No.432, East Kokab Av,45 Metri Golshahr, Karaj, Iran.		

Section 2: Hazards Identification

Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Acute toxicity, Dermal (Category 4), H312

Specific target organ toxicity - repeated exposure, Oral (Category 2), Brain, H373

Short-term (acute) aquatic hazard (Category 3), H402

Long-term (chronic) aquatic hazard (Category 3), H412

GHS Label elements, including precautionary statements

Pictogram	
Signal word	Warning

Hazard statement(s)

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

H373 May cause damage to organs (Brain) through prolonged or repeated exposure if swallowed.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER / doctor if you feel unwell.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

P314 Get medical advice/ attention if you feel unwell.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS

Contact with acids liberates very toxic gas.

- none

Section 3: Composition / Information on Ingredients

Mixture

MACUIC			
Component		Classification	Concentration*
sodium azide			
CAS-No. EC-No. Index-No. Registration number	26628-22-8 247-852-1 011-004-00-7 01-2119457019-37-XXXX	Acute Tox. 2; Acute Tox. 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H300, H330, H310, H373, H400, H410 M-Factor - Aquatic Acute:1 M-Factor - Aquatic Chronic: 1	>= 1 - < 5 %

^{*} Weight %

Section 4: First Aid Measures

Description of first-aid measures

General advice Show this material safety data sheet to the doctor in attendance.

If inhaled After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial

respiration. Oxygen if necessary. Immediately call-in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin

with water/ shower. Consult a physician.

In case of eye contact After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult

a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Combustible.

Fire may cause evolution of:

nitrogen oxides, Hydrogen chloride gas

Development of hazardous combustion gases or vapors possible in the event of fire.

Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage			
Precautions for safe handling For precautions see section 2.			
Advice on safe handling	Work under hood. Do not inhale substance/mixture.		
Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.			
Conditions for safe storage, including any incompatibilities			
Tightly closed. Dry.			

Storage conditions Do not store near acids.

Recommended storage temperature see product label.

Storage class Storage class (TRGS 510): 11: Combustible Solids

Section 8: Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Sodium azide	26628-22-8	STEL	0.3 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks		(c)	0.29 mg/m ³	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		(c)	0.11 ppm	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		С	0.29 mg/m^3	Canada. British Columbia OEL
		С	0.11 ppm	Canada. British Columbia OEL
		С	0.29 mg/m ³	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants.
		С	0.11 ppm	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants.
		С	0.29 mg/m^3	USA. ACGIH Threshold Limit Values (TLV)
		С	0.11 ppm	USA. ACGIH Threshold Limit Values

		(TLV)

Exposure controls

Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.

Skin protection

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Body Protection protective clothing **Respiratory protection**

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties	
Physical state	solid
Color	beige
Odor	peptone-like
Odor Threshold	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	No data available
Vapor pressure	No data available
Vapor density	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	7.1 - 7.3 at 35 g/l at 35 °C

Water solubility 35 g/l at 100 °C Partition coefficient: n-octanol/water No data available Density No data available Relative density No data available Explosive properties Not classified as explosive. Oxidizing properties none	Viscosity	No data available
Density No data available Relative density No data available Explosive properties Not classified as explosive.	Water solubility	35 g/l at 100 °C
Relative density No data available Explosive properties Not classified as explosive.	Partition coefficient: n-octanol/water	No data available
Explosive properties Not classified as explosive.	Density	No data available
- · · · · · · · · · · · · · · · · · · ·	Relative density	No data available
Oxidizing properties none	Explosive properties	Not classified as explosive.
	Oxidizing properties	none

Other safety information

Bulk Density ca.640 kg/m3

Section 10: Stability and Reactivity

Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed. Contact with acids liberates very toxic gas.

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions

A risk of explosion and/or of toxic gas formation exists with the following substances:

Halogenated hydrocarbon

Heavy metals

Metallic salts

Bromine

Copper

dichloromethane

carbon disulfide

sulfuric acid

dimethylsulfate

Lead

chromyl chloride

Generates dangerous gases or fumes in contact with:

Acids

Conditions to avoid

no information available

Incompatible materials

No data available

Hazardous decomposition products

In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Mixture

Acute toxicity

Acute toxicity estimates Oral - 1,598 mg/kg

(Calculation method)

Acute toxicity estimates Inhalation - 4 h - 2.96 mg/l

(Calculation method)

Acute toxicity estimates Dermal - 1,184 mg/kg

(Calculation method)

Skin corrosion/irritationNo data availableSerious eye damage/eye irritationNo data availableRespiratory or skin sensitizationNo data availableGerm cell mutagenicityNo data availableCarcinogenicityNo data availableReproductive toxicityNo data availableSpecific target organ toxicity - singleNo data available

exposure

Specific target organ toxicity - repeated Mixture may cause damage to organs through prolonged or

exposure repeated exposure. - Brain

Aspiration hazard No data available

Additional Information Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Components sodium azide

Acute toxicity

LD50 Oral - Rat - 27 mg/kg

Remarks: (RTECS)

LC50 Inhalation - Rat - male and female - 4 h - 0.054 - 0.52

mg/l (US-EPA)

LD50 Dermal - Rabbit - 20 mg/kg

Remarks: (RTECS) No data available Skin - In vitro study Result: No skin irritation

Skin corrosion/irritation Result: No skin irritation (OECD Test Guideline 439)

Eyes - Bovine cornea

Serious eye damage/eye irritation Result: No eye irritation - 4 h (OECD Test Guideline 437)

Local lymph node assay (LLNA) - Mouse

Respiratory or skin sensitizationResult: negative

(OECD Test Guideline 429)

Test Type: Mutagenicity (mammal cell test): chromosome

aberration.

Test system: Chinese hamster ovary cells

Result: negative

Germ cell mutagenicity

Test Type: unscheduled DNA synthesis assay
Test system: Chinese hamster lung cells

Result: negative

Test Type: sister chromatid exchange assay Test system: Chinese hamster ovary cells

Result: negative No data available No data available

Specific target organ toxicity - single

exposure

Carcinogenicity

Reproductive toxicity

No data available

Specific target organ toxicity - repeated

exposure

Oral - May cause damage to organs through prolonged or

repeated exposure. -

Brain

Aspiration hazard No data available

Section 12: Ecological Information	
Toxicity	
Mixture	No data available
Persistence and degradability	No data available
Bio accumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects	No data available
Components sodium azide	
Toxicity to fish	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 2.75 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata - 0.35 mg/l - 96 h (OECD Test Guideline 201)

Section 13: Disposal Consideration

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed company. Contact a licensed professional waste disposal service to dispose of this material

Contaminated packaging

Dispose of as unused product.

	Section 14: Transport Information
TDG	Not regulated as a dangerous good
IMDG	Not dangerous goods
IATA	Not dangerous goods
Further information	Not classified as dangerous in the meaning of transport regulations.

Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

Section 16: Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the

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