SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No.453/2010- United Kingdom(UK)

Diazyme DZ-Lite 3000 Plus System Tubing Cleaning Solution

Ref: 130299007M

1. Identification of the substance/preparation and company/undertaking

Identification of the substance or preparation	
Product name	DZ-Lite 3000 Plus System Tubing Cleaning Solution
Product code	130299007M
Synonyms	MAGLUMI™ System Tubing Cleaning Solution, 500ml, (130299007M)
Product type	Liquid
Use of the substance/preparation	System tubing cleaning solution
Company/undertaking identification	
Manufactured/supplied	**Diazyme Laboratories, Inc.** 12889 Gregg Court Poway, CA 92064 Tel. +1 (858) 455-4768 **Manufactured for Diazyme Laboratories by:** *Shenzhen New Industries Biomedical Engineering Co., Ltd.* *No.16, Jinhui Road, Pingshan New District, Shenzhen, 518122, P.R.China* *Tel: +86-755-21536601 Fax: +86-755-28292740*
Emergency Number	Contact your local health authority or poison control center in an emergency. Manufacturer contact number for the US is as follows: +1 (858) 455 4768

2. Hazards identification

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments

Classification	Not Classified	
Physical/chemical hazards	DZ-Lite 3000 Plus System Tubing Cleaning Solution	Not applicable
Human health hazards	DZ-Lite 3000 Plus System Tubing Cleaning Solution	Harmful if swallowed
Environmental hazards	DZ-Lite 3000 Plus System Tubing Cleaning Solution	Not applicable

3.Composition/information on ingredients

Substance/preparation:

Ingredient name	CAS number	%	UN number	Classification
DZ-Lite 3000 Plus System Tubing Cleaning Solution 1. Sodium Hypochlorite	14380-61-1	1.5	3212	Xi

See section 16 for the full text of the R-phrases declared above

See section 16 for the full text of the R-phrases declared above There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in section 8.

4. First-aid measures

First-aid measures

Inhalation	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Ingestion	Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media:

Suitable	Use dry chemical, CO2, water spray (fog) or foam.
Not suitable	None known.
Special exposure hazards	In a fire or if heated, a pressure increase will occur and the container may burst.
	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training

Hazardous combustion products	No specific data.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air)
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers
Packaging materials	Use appropriate containment to avoid environmental contamination.
Recommended	Use original container.
Specific uses	System Tubing cleaning

8. Exposure controls/personal protection

Ingredient name	**Occupational exposure limits**
DZ-Lite 3000 Plus System tubing cleaning solution	
Sodium Hypochlorite	No specific data.

Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

Occupational exposure controls	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. pressure mode.
Skin protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

General information Appearance

Physical state	DZ-Lite 3000 Plus System tubing cleaning solution	Liquid
Color	DZ-Lite 3000 Plus System tubing cleaning solution	Light Green

Important health, safety and environmental information

pH	DZ-Lite 3000 Plus System tubing cleaning solution	8.0

Boiling point	DZ-Lite 3000 Plus System tubing cleaning solution	100℃
Melting point	DZ-Lite 3000 Plus System tubing cleaning solution	Not available
Flash point	DZ-Lite 3000 Plus System tubing cleaning solution	Not available
Explosion limits	DZ-Lite 3000 Plus System tubing cleaning solution	Not available
Vapor pressure	DZ-Lite 3000 Plus System tubing cleaning solution	Not available
Relative density	DZ-Lite 3000 Plus System tubing cleaning solution	1.2
Octanol/water partition coefficient	DZ-Lite 3000 Plus System tubing cleaning solution	Not available
Viscosity	DZ-Lite 3000 Plus System tubing cleaning solution	Not available
Evaporation rate (butyl acetate = 1)	DZ-Lite 3000 Plus System tubing cleaning solution	Not available

Other information

Auto-ignition temperature	DZ-Lite 3000 Plus System tubing cleaning solution	Not available

10. Stability and Reactivity

Stability	The product is stable.
Conditions to avoid	No specific data.
Materials to avoid	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological

Potential acute health effects

Inhalation	No known significant effects or critical hazards.
Ingestion	Harmful if swallowed.
Skin contact	Irritating to eyes and skin.
Eye contact	Irritating to eyes and skin.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
DZ-Lite 3000 Plus System tubing cleaning	LD50 Oral	Rat	LD505800mg/kg	--

solution Sodium Hypochlorite				

Potential chronic health effects

Chronic toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available				

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available				

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Not available			

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Not available				

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental Species toxin	Dose	Exposure
Not available					

Chronic effects	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation	No specific data.
Ingestion	No specific data.
Skin	No specific data.
Eyes	No specific data.
Other adverse effects	No specific data.

12. Ecological information

Environmental effects: No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
DZ-Lite 3000 Plus System tubing cleaning solution	No specific data.	No specific data.	No specific data.	No specific data.

Conclusion/Summary Biodegradability	Not available
Conclusion/Summary	Not available.
Other adverse effects	No known significant effects or critical hazards.

13. Disposal considerations

Methods of disposal	The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
European waste catalogue (EWC)	Not available.
Hazardous waste	The classification of the product may meet the criteria for a hazardous waste.

14. Transport information

International transport regulations

Regulatory	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated.	—	—	—	—	—
ADNR Class	Not regulated.	—	—	—	—	—
IMDG Class	Not regulated.	—	—	—	—	—
IATA Class	Not regulated.	—	—	—	—	—

PG* : Packing group

15. Regulatory information

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols	 harmful
Risk phrases	R22- Harmful if swallowed
Safety phrases	S28- After contact with skin, wash immediately with plenty of water.
Contains	DZ-Lite 3000 Plus System Tubing Cleaning Solution Sodium Hypochlorite
Product use	Industrial applications.
Europe inventory	Not determined.

16. Other information

DZ-Lite 3000 Plus System Tubing Cleaning Solution Sodium Hypochlorite	No specific data.

History	
Date of issue/Date of revision	2018-2-2.
revision Version	4
Prepared by	**Shenzhen New Industries Biomedical Engineering Co., Ltd**

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.