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SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name Solution A2

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

Identified uses Research-Use Only, laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Manufacturer Phase Scientific International Limited

32/F, Gravity, 29 Hing Yip Street,

Hong Kong

Phone: 852-3892-7200

1.4 Emergency telephone number

Emergency Number +1 (657) 233-5880 [US]

+852 3892 7200 [Hong Kong]

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS - Classification

Health hazards

Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2
Physical hazards Not Hazardous
Environmental Hazards Not Hazardous

2.2 Label elements

Signal word

Warning

Hazard pictograms



Hazard Statements

H315 - Causes skin irritation

H319 – Causes serious eye irritation

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Precautionary Statements

Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P264 - Wash hands thoroughly after handling

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P337 + P313 - If eye irritation persists: Get medical advice/attention

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

2.3 Other hazards

Not applicable

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight percent	
Anionic detergent	7-13	

We recommend handling all chemicals with caution.

Section 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a doctor.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required.

Eve contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

Ingestion

Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.

Notes to Physician

Treat symptomatically.

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Most important symptoms and effects, both acute and delayed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

4.3 Indication of any immediate medical attention and special treatment needed

If skin irritation occurs: Get medical advice/ attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Section 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Water spray, Carbon dioxide (CO₂), Foam, Dry chemical

Unsuitable Extinguishing Media

No information available

5.2 Special hazards arising from the substance or mixture

Not known

5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective suit

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protection equipment. See Section 8 for more detail.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material.

6.4 Reference to other sections

See Section 8 for more information.

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment. See Section 8 for more detail. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use adequate ventilation and/or wear appropriate respirator.

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7. 2 Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers. Store in accordance with local regulations.

7.3 Specific end use(s)

For research use only.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Chemical Name	China OEL (MAC)	China - Skin Absorbers	Hong Kong OEL
Anionic detergent	None	None	None

Engineering measures

Ensure adequate ventilation, especially in confined areas

8.2 Exposure controls

Personal protective equipment

Respiratory protection

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Hand protection

Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Wear laboratory coat for body protection.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

No special environmental precautions required.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Clear liquid

Odour Mixture has not been tested

pH value > 6-8

Melting point Mixture has not been tested

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Boiling point and boiling rangeMixture has not been testedFlash pointMixture has not been testedSelf-ignitingMixture has not been testedDecomposition temperatureMixture has not been tested

Evaporation rateNo data available **Flammability (solid, gas)**Not applicable

Upper explosion limitMixture has not been testedLower explosion limitMixture has not been testedVapour pressureMixture has not been testedRelative densityMixture has not been tested

Specific gravity No data available

Solubility Mixture has not been tested

Partition coefficient: n-octanol/water No data available

ViscosityMixture has not been testedExplosive propertiesMixture has not been testedOxidising propertiesMixture has not been tested

9.2 Other informationNo data available

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity None known

10.2 Chemical stabilityStable under normal conditions **10.3 Possibility of hazardous reactions**Hazardous reaction has not been reported

10.4 Conditions to avoid None known

10.5 Incompatible materialsNo dangerous reactions known10.6 Hazardous decomposition productsNo dangerous reactions known

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Chemical Name	LD ₅₀ (oral, rat/mouse)	LD ₅₀ (dermal, rat/mouse)	LD ₅₀ (inhalation, rat/mouse)
Anionic detergent	1288 mg/kg (Rat)	No data available	>3900mg/m³(Rat)
	1783 mg/kg (Mouse)		

Principal routes of exposure potential health effects

Irritation Skin irritation, Serious Eye Damage / Eye Irritation Conclusive but not sufficient for classification Corrosivity Conclusive but not sufficient for classification Sensitization Conclusive but not sufficient for classification **STOT-single exposure STOT-repeated exposure** Conclusive but not sufficient for classification Carcinogenicity Conclusive but not sufficient for classification Mutagenicity Conclusive but not sufficient for classification Reproductive toxicity Conclusive but not sufficient for classification Conclusive but not sufficient for classification **Aspiration hazard**

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Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity

The environmental impact of this product has not been fully investigated.

Chemical	Freshwater Algae Data	Water Flea Data	Freshwater Fish	Microtox	Log
Name			Species Data	Data	Pow
Anionic	Desmodesmus subspicatus	Daphnia magna	No data	No data	1.6
Detergent	EC ₅₀ =42 mg/L (96 h)	EC ₅₀ =21.2 mg/L (24h)	available	available	
	Desmodesmus subspicatus	Daphnia magna			
	EC ₅₀ =53 mg/L (72 h)	EC ₅₀ =1.8 mg/L (48 h)			
	Desmodesmus subspicatus				
	EC ₅₀ =30-100 mg/L (96 h)				
	Pseudokirchneriella subcapitata				
	EC ₅₀ =117 mg/L (96h)				
	Pseudokirchneriella subcapitata				
	EC ₅₀ = 3.59 - 15.6 mg/L (96 h)				

12.2 Persistence and degradability

12.3 Bio-accumulative potential

No data available

No data available

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

12.6 Other adverse effects

No data available

Section 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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 according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

Section 14: TRANSPORT INFORMATION

IATA/ADR/DOT-US/IMDG

Not regulated in the meaning of transport regulations

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not applicable
14.3 Transport hazard class(es)	Not applicable
14.4 Packaging group	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	Not applicable
14.7 Transport in bulk according to Annex II of	Not applicable
Marpol 73/78 and the IBC Code	

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Section 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical Name	US (TSCA)	IECSC – China Inventory of Existing Chemical Substances	EINECS (European Union)	ELINCS (European List of Notified Chemical Substances)
Anionic Detergent	Listed	Listed	Listed	-

China

No information available

Chemical Name	China – Catalogue	China –	China – Catalog	China – List of Dangerous
	of Occupational	Dangerous	of Hypertoxic	Chemicals for Priority
	Hazard Factors	Goods List	Chemicals	Management
Anionic Detergent	Not Listed	Not Listed	Not Listed	Not Listed

Section 16: OTHER INFORMATION

Further information

This information is based on our present knowledge. The information given is designed only as a guidance for safe handling and is not to be considered a warranty or quality specification. All materials and mixtures may present unknown hazards and should be used with caution.

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