

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : Aquasphere
 Product code : M77033

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Water Treatment

1.3. Supplier

JR Simplot Company
 P.O. Box 70013
 Boise, ID 83707
 T 1-208-336-2110

1.4. Emergency telephone number

Emergency number : CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
alpha-amylase	(CAS-No.) 9000-90-2	< 0.1	Resp. Sens. 1, H334
Cellulase	(CAS-No.) 9012-54-8	< 0.1	Resp. Sens. 1, H334
subtilisin	(CAS-No.) 9014-01-1	< 0.05	Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 STOT SE 3, H335
Lipase	(CAS-No.) 9001-82-1	< 0.01	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.

Aquasphere

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Aquasphere

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

alpha-amylase (9000-90-2)		
Not applicable		
Cellulase (9012-54-8)		
Not applicable		
subtilisin (9014-01-1)		
ACGIH	ACGIH Ceiling (mg/m ³)	0.00006 mg/m ³ (Subtilisins, as 100% crystalline active enzyme; USA; Momentary value; TLV - Adopted Value)
Lipase (9001-82-1)		
Not applicable		

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granules.
Colour	: Off-white
Odour	: Fermentation odor
Odour threshold	: No data available
pH	: No data available
Melting point	: 100 - 190 °C
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available

Aquasphere

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Density	: 1.4 g/cm ³
Solubility	: Dispersible.
Log Pow	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 200 °C
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: Not applicable
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

alpha-amylase (9000-90-2)

LD50 oral rat	> 7500 mg/kg (Rat)
---------------	--------------------

subtilisin (9014-01-1)

LD50 oral rat	3700 mg/kg (Rat)
ATE US (oral)	3700 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

subtilisin (9014-01-1)

STOT-single exposure	May cause respiratory irritation.
----------------------	-----------------------------------

STOT-repeated exposure	: Not classified
------------------------	------------------

Aspiration hazard	: Not classified
-------------------	------------------

Aquasphere

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Viscosity, kinematic	: No data available
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

alpha-amylase (9000-90-2)	
LC50 fish 1	> 100 mg/l (LC50)
EC50 Daphnia 1	> 100 mg/l (EC50)
Threshold limit algae 1	> 100 mg/l (EC50)

subtilisin (9014-01-1)	
LC50 fish 1	> 100 mg/l (LC50)

12.2. Persistence and degradability

Aquasphere	
Persistence and degradability	Not established.

alpha-amylase (9000-90-2)	
Persistence and degradability	Biodegradable in water. Not established.

Cellulase (9012-54-8)	
Persistence and degradability	Not established.

subtilisin (9014-01-1)	
Persistence and degradability	Biodegradability in water: no data available. Not established.

Lipase (9001-82-1)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Aquasphere	
Bioaccumulative potential	Not established.

alpha-amylase (9000-90-2)	
Bioaccumulative potential	Not bioaccumulative. Not established.

Cellulase (9012-54-8)	
Bioaccumulative potential	Not established.

subtilisin (9014-01-1)	
Bioaccumulative potential	No bioaccumulation data available. Not established.

Lipase (9001-82-1)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid unintentional release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid unintentional release to the environment.

Aquasphere

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

Lipase	CAS-No. 9001-82-1	< 0.01%
--------	-------------------	---------

alpha-amylase (9000-90-2)

EPA Labeling Requirements

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

Cellulase (9012-54-8)

EPA Labeling Requirements

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

subtilisin (9014-01-1)

EPA Labeling Requirements

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

15.2. International regulations

CANADA

alpha-amylase (9000-90-2)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Cellulase (9012-54-8)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

subtilisin (9014-01-1)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Lipase (9001-82-1)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Aquasphere

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 04/10/2020

Other information : None.

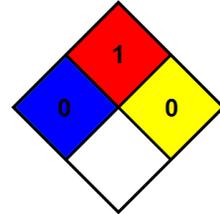
Full text of H-statements:

H315	Causes skin irritation.
H318	Causes serious eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



SDS US (GHS HazCom 2012)

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.