SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

Version: 12/10/2020
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Section 1 - Identification

Product Name	Amino-Activated MagPoly Beads
Cat. No.	MAGP044, MAGP045
Product Type	Liquid
Company	Bio Basic Asia Pacific Pte Ltd.
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	Singapore 609930
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Section 2 - Hazards Identification

GHS-Classification

Classification of the Substance of mixture

Acute Toxicity-Oral-Category 3
Acute Toxicity-Dermal-Category 2
Acute Toxicity-Inhalation-Category 2
Hazardous To Aquatic Environment-Short-Term (Acute) Hazard-Category 3
Hazardous to Aquatic Environment-Long-Term (Chronic) Hazard-Category 2

Signal Word

Danger

Hazard Pictograms

Hazard Statements

H301 - Toxic if swallowed
H310 - Fatal in contact with skin
H330 - Fatal if inhaled
H402 - Harmful to aquatic life
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention

P260-Do not breathe gas/mist/vapor/spray.
P262-Do not get in eyes, on skin, or on clothing.
P264-Wash hands and other parts of the body (if related) thoroughly after handling.
P270-Do not eat, drink or smoke when using this product.
P271-Use only outdoors or with adequate ventilation.
P273-Avoid release to the environment.
P280-Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P284-In case of inadequate ventilation wear respiratory protection.

Response

P310-Immediately call a POISON CENTER/doctor.
P320-Specific treatment is urgent (see related instructions on the label).
P321-Specific treatment (see related instructions on the label).
P322-Specific treatment (see on the label).

	P330-Rinse mouth. P361-Take off immediately all contaminated clothing. P363-Wash contaminated clothing before reusing. P391-Collect spillage. P301+P310-IF SWALLOWED: Immediately call a POISON CENTER/doctor. P302+P350-IF ON SKIN: Wash with plenty of soap and water. P304+P340-IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Storage	P405-Store locked up. P403+P233-Store in a well-ventilated place. Keep container tightly closed.
Disposal	P501 - Dispose of contents/container to all local, regional, national and international regulations.
Physical hazards	No information available
Healthy hazards	
Inhaled	Inhalation of vapors or aerosols (mists, fumes), generated by the product during normal handling, may produce severe toxic effects; these may be fatal
Ingestion	Toxic effects may result from the accidental ingestion of the product
Skin Contact	Skin contact with the product may produce severely toxic effects; systemic effects may result following absorption and these may be fatal
Eye	This product may cause temporary discomfort following direct contact with eye
Environmental Hazards	This product is toxic to aquatic life with long lasting effects. Please refer to 12th chapter of SDS

Section 3 - Composition / Information on Ingredients

Substance/Mixture Mixture

Component	CAS No.	Weight %
Reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one	55965-84-9	<= 0.05
Sorbitan monolaurate, ethoxylated	9005-64-5	<= 0.01

Section 4 - First Aid Measures

Skin Contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of soap and water for at least 15 minutes and consult a physician if you feel uncomfortable.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Ingestion	Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

Advice for protecting the rescuer

Remove all sources of ignition and increase ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use personal protective equipment including respirators.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Symptoms may be delayed.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media	Use extinguishing media suitable for surrounding area.
Unsuitable Extinguishing Media	There is no restriction on the type of extinguisher which may be used.
Specific Hazards arising from the chemical	Development of hazardous combustion gases or vapor is possible in the event of fire. May expand or decompose explosively when heated or involved in fire.
Advice for firefighters	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear. Fight fire from a safe distance, with adequate cover. 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

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment, do not breathe gas/mist/vapor/spray. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided.
Methods for Cleaning Up	Cut off the source of the leak as much as possible. Keep leaks in a ventilated place. Absorb spilled material in dry sand or inert absorbent. In case of large amounts of spillage, contain a spill by bunding. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Contain spillage and then collect with an electrically protected vacuum cleaner or by wet-brushing and place it in container.

Section 7 - Handling and Storage

Precautions for handling	Handling is performed in a well-ventilated place. Wear suitable protective equipment. Avoid contact with skin and eyes. Keep away from heat / sparks / open flames / hot surfaces.
Precautions for storage	Store at 2-8℃, Keep containers tightly closed. Keep containers in a dry, cool and well-ventilated place. Keep away from heat/sparks/open flames/hot surfaces. Store away from incompatible materials and foodstuff containers.

Section 8 - Exposure Controls/Personal Protection Equipment

Control parameters

Occupational Exposure limit values

No relevant regulations

Biological limit values

No relevant regulations

Monitoring methods

EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. GBZ/T 300 series standard Determination of toxic substances in workplace air.

Engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Set up emergency exit and necessary risk-elimination area.

Personal Protective Equipment

Eye protection	Must wear appropriate safety goggles.
Hand protection	Must wear appropriate chemical protective gloves.
Respiratory protection	Must wear appropriate personal dust proof gas mask.
Skin and body protection	Must wear appropriate chemical protective clothing and chemical resistant shoes.

Section 9 - Physical and Chemical Properties

Appearance	Liquid
Color	Black or brown
Odor	No information available
Odor threshold	No information available
pH	No information available
Melting/freezing point (℃)	22.2（1atm, reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one ）
Initial boiling point/range (℃)	> 100（Sorbitan monolaurate, ethoxylated）
Flash point (Closed cup, ℃)	> 126（Sorbitan monolaurate, ethoxylated）
Evaporation rate	No information available

Flammability	No information available
Upper/lower explosive limits[%(v/v)]	Upper limit：No information available；Lower limit：No information available
Vapor pressure	＜0.1kPa（Sorbitan monolaurate, ethoxylated）
Vapor density (Air = 1)	＜0.1（Sorbitan monolaurate, ethoxylated）
Relative density (Water=1)	1.07（Sorbitan monolaurate, ethoxylated）
Solubility(mg/L)	Miscible with water（Sorbitan monolaurate, ethoxylated）
n-octanol/water partition coefficient	1.23 - 3.86（Sorbitan monolaurate, ethoxylated）
Auto-ignition temperature (℃)	No information available
Decomposition temperature (℃)	No information available
Kinematic viscosity(mm2/s)	No information available

Section 10 - Stability and Reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Incompatible materials	No information available.
Possibility of hazardous reactions	No information available.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Conditions to avoid	Incompatible materials, heat, flame and spark.

Section 11 - Toxicological Information

Information on toxicological effects

Acute toxicity

Component/ Cas No.	LD_{50}(oral)	LD_{50}(dermal)	LC_{50}(inhalation,4h)
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one	53mg/kg(Rat)	No information available	0.171mg/L(Rat)
Sorbitan monolaurate, ethoxylated	> 33000mg/kg(Mouse)	No information available	No information available

Carcinogenicity

Component/ Cas No.	IARC	NTP
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one	Not Listed	Not Listed
Sorbitan monolaurate, ethoxylated	Not Listed	Not Listed

Others

Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Reproductive toxicity(additional)	Based on available data, the classification criteria are not met

Section 12 - Ecological Information

Product/ingredient name

Acute aquatic toxicity

Component	Fish	Crustaceans	Algae
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one	LC50：0.19mg/L (96h)(Fish)	EC50：0.16mg/L (48h)(Crustaceans)	ErC50：0.0199mg/L (72h)(Algae)

Chronic aquatic toxicity

Component	Fish	Crustaceans	Algae
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one	NOEC：0.02mg/L(Fish)	No information available	No information available

Persistence and degradability

Component	Cas No.	Persistence (water/soil)	Persistence (air)
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one	55965-84-9	High	High

Bioaccumulative potential

Component	Cas No.	Bioaccumulative potential	comments
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one	55965-84-9	Low	Log Kow=0.0444

Mobility in soil

Component	Cas No.	Mobility in soil	Soil Organic Carbon-Water Partitioning Coefficient (Koc)
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one	55965-84-9	Low	45.15

Results of PBT and vPvB assessment

Component	Cas No.	Results of PBT and vPvB assessment (according to (EC) No 1907/2006)
Sorbitan monolaurate, ethoxylated	9005-64-5	Not PBT/vPvB
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one	55965-84-9	Insufficient information, temporarily unable to evaluate

Section 13 - Disposal Considerations

Waste chemicals Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.

Contaminated packaging Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire.

Disposal recommendations Refer to section waste chemicals and contaminated packaging.

Section 14 - Transport Information

Transporting Label Not applicable

IMDG-CODE NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

ICAO/IATA-DGR NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

UN-ADR NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Methods of packing Packaging as recommended by manufacturer.

Precautions for transport Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.

Section 15 - Regulatory Information

International Chemical Inventory

Component	EC inventory	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AIIC	ENCS
Sorbitan monolaurate, ethoxylated	√	√	√	√	√	√	√	√	√
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H -isothiazol-3-one	×	×	√	√	√	√	√	×	√

【EC inventory】 European Inventory of Existing Commercial Chemical Substances
【TSCA】 United States Toxic Substances Control Act Inventory
【DSL】 Canadian Domestic Substances List
【IECSC】 China Inventory of Existing Chemical Substances
【NZIoC】 New Zealand Inventory of Chemicals
【PICCS】 Philippines Inventory of Chemicals and Chemical Substances
【KECI】 Korea Existing Chemicals Inventory
【AIIC】 Australia. Inventory of Industrial Chemicals (AIIC)
【ENCS】 Japan Inventory of Existing & New Chemical Substances

Note:

"√" Indicates that the substance included in the regulations

"×" That no data or included in the regulations

Section 16 - Other Information

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Key to abbreviations

BCF - Bioconcentration Factor

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

LogPow - logarithm of the octanol/water partition coefficient

UN = United Nations

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End of SDS