ZOBELL MARINE AGAR 2216 (MARINE AGAR 2216)

SECTION 1: PRODUCT IDENTIFICATION

Product Name: ZOBELL MARINE AGAR 2216 (MARINE AGAR 2216)
Product Code: TM 207
REACH Registration Number: This product is a mixture. Reach registration number is not available for this mixture
Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses :Laboratory Chemicals, Analytical Purpose, Biochemical Analysis.

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture
CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]
Not a hazardous substance or mixture according to Regulation (EC) No.1272/2008.
Label elements
Labeling according to Regulation (EC) No.1272/2008
The product does not need to be labelled in accordance with EC directives or respective national laws.
Other hazards
None

SECTION 3: COMPOSITION /INFORMATION ON INGREDIENTS

Component	Classification	Concentration
Boric acid		
CAS No. : 10043-35-3 EC No. : 233-139-2 Index-No : 005-007-00-2	**As Per EC Regulation 1272/2008** Repr.Tox. 1A, 1B H360	>=0.01 - <=0.1%

Component	Classification	Concentration
Calcium chloride, anhydrous		
CAS No. : 10043-52-4 EC No. : 233-140-8	**As Per EC Regulation 1272/2008** Eye Irrit. 2A H319	>=1.0 - <=5.0%

Component	Classification	Concentration
Potassium bromide		
CAS No. : 2139-62-0 EC No. : 231-830-3	**As Per EC Regulation 1272/2008** As Per EC Regulation 1272/2008 Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H315; H319; H335	>=0.1 - <=1.0

Component	Classification	Concentration
Strontium chloride		
CAS No. : 10476-85-4 EC No. : 233-971-6	**As Per EC Regulation 1272/2008** Skin Irrit. 2; Eye Dam. 1; STOT SE 3 H315; H318; H335	>=0.01 - <=0.1%

Component	Classification	Concentration
Ammonium nitrate		
CAS No. : 10476-85-4 EC No. : 233-971-6	**As Per EC Regulation 1272/2008** Ox. Sol. 3; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H272; H315; H319; H335	>=0.001 - <=0.01%

Refer Section 16 for complete statement of H codes and its classification

SECTION 4: FIRST AID MEASURES

Description of first aid measures
General advice
Consult a physician**.** Show this safety data sheet to the doctor in attendance.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects, both acute and delayed
No data available.
Indication of immediate medical attention and special treatment needed
No data available

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media
No data available
Special hazards arising from the substance or mixture
Carbon oxides, Sodium oxides, Hydrogen chloride gas, Magnesium oxides, Sulphur oxides, Calcium oxide, Potassium oxides, Nitrogen oxides (NOx)
Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.
Further information
No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up
Soak up with inert adsorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
Reference to other sections
For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Recommended StorageTemperature: On receipt store between 10-25°C
Specific end uses
Apart from the uses mentioned in section 1, no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Components with workplace control parameters
Exposure controls
Appropriate engineering controls
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products.
Personal protective equipment
Hygiene measure
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product.
Eye/face protection
Tightly fitting safety goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Skin protection Handle with gloves.
Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Body protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Environment exposure controls
Do not empty into drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance	:	Cream to yellow coloured homogeneous free flowing powder
b) Odour	:	No data available
c) Odour Threshold	:	No data available
d) pH	:	7.40 - 7.80
e) Melting point/freezing point	:	No data available
f) Initial boiling point and boiling range	:	No data available
g) Flash point	:	No data available
h) Evaporation rate	:	No data available
i) Flammability (solid, gas)	:	No data available
j) Upper/lower flammability or explosive limits	:	No data available
k) Vapour pressure	:	No data available

l) Vapour density	:	No data available
m) Relative density	:	No data available
n) Water solubility	:	No data available
o) Partition coefficient noctanol/water	:	No data available
p) Auto-ignition temperature	:	No data available
q) Decomposition temperature	:	No data available
r) Viscosity	:	No data available
s) Explosive properties	:	No data available
t) Oxidizing properties	:	No data available

Other safety information
No data available

SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity: No data available
Chemical stability: No data available.
Possibility of hazardous reactions: No data available
Conditions to avoid: No data available
Incompatible materials: No data available
Hazardous decomposition products: Refer Section 5

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity: No data available
Skin corrosion/irritation: No data available
Serious eye damage/eye irritation: No data available
Respiratory or skin sensitization: No data available
Germ cell mutagenicity: No data available
Carcinogenicity:
IARC: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity: No data available
Specific target organ toxicity- single exposure: No data available
Aspiration hazard: No data available
Potential Health
Effects Inhalation: REFER SECTION 2
Skin: REFER SECTION 2
Eyes:REFER SECTION 2
Ingestion: REFER SECTION 2
Additional Information: RTECS: Not available
Components
Phenol Red
Acute Oral Toxicity
Rat LD50: >600 mg/Kg
Rat Intravenous LD50 :752 mg/Kg
Mouse Intravenous LD50: 1368 mg/Kg Inhalation May cause respiratory irritation.
Additonal Information: RTECS: SJ7490000
Components
Boric Acid
Acute Toxicity
Rat oral LD50 : 2660 mg/kg
Rabbit dermal LD50 : 2000 mg/kg

Mouse Oral: LD50 = 3450 mg/kg.
Additional Information:
RTECS : ED4550000
Specific concentration limits (SCL): >5.5%
Boric acid is included in the Candidate List of Substances of Very High Concern (SVHC) according toRegulation (EC) No. 1907/2006 (REACH)
Calcium chloride
Acute oral toxicity
Rat LD50 : 1,000 mg/kg
(As per IUCLID)
Acute dermal toxicity
Rat LD50 : 2,630 mg/kg
(As per IUCLID)
Skin irritation
Rabbit
Result : No irritation
(As per OECD Test Guideline 404)
Eye irritation
Rabbit
Result: Eye irritation
(As per OECD Test Guideline 405)
Causes serious eye irritation.
Additional Information
RTECS: EV9800000
Potassium bromide
Acute oral toxicity
Rat oral LD50: 2000 mg/kg,7d (ECHA)
(As per OECD Guideline 401)
Effect on Skin
Rabbit- No skin irritation ,4h
(As per OECD Guideline 404)
Effect on Eyes
Rabbit- Irritating to eyes
(As per OECD Guideline 405)
Germ cell mutagenicity
No data available
Carcinogenicity
No data available
Reproductive toxicity
No data available
Specific Target Organ Toxicity -Single Exposure
No data available
Specific Target Organ Toxicity -Repeated Exposure
No data available
Aspiration hazard
No data available
Additional Information
RTECS : TS7650000
Strontium chloride
Acute oral toxicity
Rat LD50 : 2,250 mg/kg
Germ cell mutagenicity
Mouse : Cytogenetic analysis
Specific target organ toxicity - single exposure

Inhalation : May cause respiratory irritation.
Additional information:
RTECS: WK8400000
Ammonium nitrate
Acute oral toxicity
LD50 rat: 2,462 mg/kg
Symptoms: Nausea, Vomiting, Diarrhoea, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
(OECD Test Guideline 401)
Acute inhalation toxicity
LC50 rat: > 88.8 mg/l; 4 h (IUCLID)
Symptoms: Inhalation may lead to the formation of oedemas in the respiratory tract.
(OECD Test Guideline 401)
Additional Information:
RTECS:BR9050000
Further information:
After absorption of large quantities: Symptoms: Methaemoglobinaemia with headache, cardiac arrhythmia, drop in blood pressure, dyspnoea, and spasms, key symptom: cyanosis (blue colouration of the blood). The following applies to ammonium salts in general: after swallowing: local irritation symptoms, nausea, vomiting and diarrhoea. Systemic effect: after the uptake of very large quantities: drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis and haemolysis.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity
No data available
Components:
Boric Acid
Toxicity to fish Gambusia affinis LC50 :5600 mg/l
Rainbow trout LC50:150mg B/L;24d
Goldfish LC50:46mg; 7d
Toxicity to daphnia and other aquatic invertebrates Daphnia EC50 :115 mg/l
Components Calcium chloride
Toxicity to fish
Lepomis macrochirus (Bluegill sunfish) LC50 : 10,650 mg/l; 96 h (As per IUCLID)
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea) EC50 : 144 mg/l; 48 h (As per IUCLID)
Toxicity to algae AlgaeIC50 : 3,130 mg/l; 120 h (As per IUCLID)
Components Potassium bromide
Toxicity to fish Pimephales promelas (Fathead Minnow) LC50: > 45 mg/l; 96 h As per IUCLID
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (water flea) EC50: >1000 mg /L; 48 h As per OECD Test guideline 202
Components: Strontium chloride
Toxicity to fish Austropotamobius pallipes pall LC50 : 440 mg/l; 96 h
Toxicity to daphnia and other aquatic invertebrates Daphnia magna (Water flea) EC50 : 94 mg/l; 48 h
Toxicity to aquatic algae and cyanobacteria
Chlorella vulgaris : >150 mg Sr/L; 12 wk unbounded NOEC
Components: Ammonium Nitrate
LC50 Cyprinus carpio (Carp): 74 mg/l; 48 h (IUCLID)
Toxicity to daphnia and other aquatic invertebrates EC50 Daphnia magna (Water flea): 555 mg/l(IUCLID)
Toxicity to algae IC50 Scenedesmus quadricauda (Green algae): 83 mg/l(IUCLID)
Persistence and degradability
No data available
Bioaccumulative potential

No data available
Mobility in soil
No data available
PBT and vPvB assessment: This preparation contains no substance considered to be persistent,bioaccumulating or toxic (PBT) at levels of 0.1% or higher.
Other adverse effects No data available

SECTION 13: DISPOSAL CONSIDERATION

Waste treatments methods
Product
Offer surplus and non- recyclable solutions to a licenced company. Contact a licenced professional waste disposal service to dispose off this material.
Contaminated packaging
Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

UN - No
ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

UN proper shipping name

ADNR	:	Not dangerous goods
ADR	:	Not dangerous goods
IATA_C	:	Not dangerous goods
IATA_P	:	Not dangerous goods
IMDG	:	Not dangerous goods
RID	:	Not dangerous goods

Transport hazard class(es)
ADNR : - ADR : - IATA_C : - IATA_P : - IMDG : - RID : -
Packaging group
ADNR : ADR : IATA_C : IATA_P : IMDG : RID :
Environmental hazards
ADNR : No ADR : No IMDG : Marine Pollutant No IATA_C : No IATA_P : No RID : No
Special precautions for use No data available

SECTION 15: REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
Safety health and environment regulations/legislation specific for the substance or mixture
No data available
Chemical Safety Assessment
No data available

SECTION 16: OTHER INFORMATION

H272	May intensify fire; oxidizer
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child

Eye Dam. 1	Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage or eye irritation, Category 2A
Ox. Sol. 3	Oxidising solids, Category 3
Repr.Tox. 1A, 1B	Reproductive toxicity, Category 1A, 1B
Skin Irrit. 2	Skin corrosion or irritation, Category 2
STOT SE 3	Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.