

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form
Substance name **Provect-ABR (Aerobic Bioremediation Reagent)**
CAS No
Formula

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Reagent for enhancing aerobic biodegradation of organic contaminants

1.3. Details of the supplier of the safety data sheet

Provectus Environmental Products, Inc. 2871 West Forest Road, Suite 2, Freeport Illinois 61032 USA

1.4. Emergency telephone number

815 650 2230 :

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Irrit. 2 H315
Eye Irrit. 2B H320
STOT SE 3 H335

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H315 - Causes skin irritation
H320 - Causes eye irritation
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) : P261 - Avoid breathing dust
P264 - Wash exposed skin thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves, eye protection
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to comply with local, state and federal regulations

2.3. Other hazards

Other hazards not contributing : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Monoammonium phosphate	CAS: 7722-76-1	10 to 60%	Not Classified
Calcium Carbonate	CAS: 471-34-1	0-10%	Skin Irrit. 2, H315 Eye Irrit. 2B H320 STOT
Magnesium Oxide	CAS: 1309-48-4	0-10%	Not Classified
Food Grade Organic Carbons	Proprietary	20-50%	Not Classified

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

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 to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Obtain medical assistance.

SECTION 5: Firefighting measures

5.1. 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. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Safety glasses. Gloves. Dust mask.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
 Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : 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 vapor. Avoid breathing dust. Use eye protection. Use outdoors or in a well-ventilated area.
 Hygiene measures : Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container tightly closed. Keep dry
 Incompatible products : Strong oxidizers. Strong acids.
 Incompatible materials : Sources of ignition. Direct sunlight. Acid or base

7.3. Specific end use(s)

Not for drinking water use

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Calcium Carbonate (471-34-1)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³

8.2. Exposure controls

- Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.
 Personal protective equipment : Avoid all unnecessary exposure.
 Hand protection : Wear protective gloves.
 Eye protection : Chemical goggles or 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 : White to brown powder
 Molecular mass : 100 g/mol, variable
 Color : white to brown
 Odor : None to slightly sweet.
 Odor threshold : No data available
 pH : 5 to 6 (aqueous)
 Relative evaporation rate (butylacetate=1) : No data available
 Melting point : 520 °C
 Freezing point : No data available
 Boiling point : Not applicable
 Flash point : Not applicable
 Self ignition temperature : Not applicable
 Decomposition temperature : <500°C

Flammability (solid, gas) : Combustible
 Vapor pressure : No data available
 Relative vapor density at 20 °C : No data available
 Relative density : No data available

Density : 2.93 g/cm³
 Solubility : Water: 0.00153 g/100ml
 Log Pow : No data available
 Log Kow : No data available
 Viscosity, kinematic : No data available
 Viscosity, dynamic : No data available
 Explosive properties : No data available
 Oxidising properties : No data available
 Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with acid or base.

10.4. Conditions to avoid

Direct sunlight. Keep Dry prior to use. Extremely high or low temperatures. NOT FOR DRINKING WATER APPLICATION

10.5. Incompatible materials

Strong acids. Strong oxidizers.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide .Phosphorus oxides; Ammonia

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Calcium Carbonate (V)471-34-1	
LD50 oral rat	6450 mg/kg

Skin corrosion/irritation : May cause skin irritation.
 Serious eye damage/irritation : Causes eye irritation.
 Respiratory or skin sensitisation : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified
 Reproductive toxicity : Not classified
 Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified
 Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : May cause respiratory irritation.
 Symptoms/injuries after skin contact : Causes skin irritation.
 Symptoms/injuries after eye contact : Causes eye irritation.
 Likely routes of exposure : Inhalation;Skin and eye contact

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Calcium Carbonate (471-34-1)

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

Calcium Carbonate (471-34-1)

Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

May irritate eye : Not for drinking water

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
 Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

Additional information

Complies with International Inventories : No supplementary information available.

ADR

Transport document description :

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Calcium Carbonate (471-34-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Calcium Carbonate (471-34-1)

Listed on the Canadian DSL (Domestic Substances List) inventory.
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WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

Calcium Carbonate (471-34-1)

Not listed on the Canadian Ingredient Disclosure List

15.3. US State regulations

No additional information available

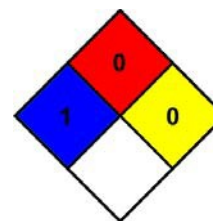
SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Eye Irrit. 2B	Serious eye damage/eye irritation, Category 2B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
 NFPA fire hazard : 0 - Materials that will not burn.
 NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible
 Flammability : 0 Minimal Hazard
 Physical : 0 Minimal Hazard
 Personal Protection : E

SDS US (GHS HazCom 2012)

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