



SAFETY DATA SHEET

Issue Date 01-May-1993

Revision Date 29-Nov-2012

Version 1

1. IDENTIFICATION

Product Identifier

Product Name CONDOR LAND RECLAIMER

Other means of identification

SDS # BARCODE ES-04

UN/ID No UN1760
Product Code Barcode ES-04

Recommended use of the chemical and restrictions on use

Recommended Use Soil Treatment.

Details of the supplier of the safety data sheet

Manufacturer Address

Earth Science Products, Corporation
23735 NE Airport Rd.
Aurora, OR 97002
Mailing Address: PO BOX 327
Wilsonville, OR 97070
<http://earthscienceproducts.com>

Emergency telephone number

Company Phone Number Phone: 001 503-678-1216
Fax: 001 503-678-3374
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America) Contract #74846

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1

Signal word

Danger

Hazard statements

Causes severe skin burns and eye damage



Appearance Dark Colored

Physical state Oily liquid

Odor Characteristic

Precautionary Statements - Prevention

Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

Wash contaminated clothing before reuse
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not Applicable

Other Information

Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Water	7732-18-5	80	*
Buffered Sulfuric Acid	7664-93-9	20-25	*

Note: 2% of the mixture contains natural ion exchange polymers, colloidal dispersants and sulfonated surfactants in buffered sulfuric acid

4. FIRST AID MEASURES

First aid measures

Inhalation

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical advice/attention.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call a physician or poison control center immediately.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Most important symptoms and effects, both acute and delayed

Symptoms Inhalation of fumes or acid mist can cause irritation or corrosive burns to the upper respiratory system, including nose, mouth and throat. Irritation and corrosive burns to mouth, throat, and stomach.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire Dry chemical or CO2.

Unsuitable Extinguishing Media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical

Prolonged temperatures above 300 degrees C will eventually evaporate the water and sulfur trioxide will be given off.

Hazardous combustion products Sulfur Trioxide.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dilute small spills or leaks with plenty of water. If in a confined area, neutralize residue with alkali such as soda ash or lime. Adequate ventilation is required due to release of Carbon Dioxide.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. When diluting always add to water. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from freezing. Protect from direct sunlight. Store locked up.

Incompatible materials Bases. Zinc.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Buffered Sulfuric acid 7664-93-9	TWA: 0.2 mg/m ³ thoracic fraction	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³	IDLH: 15 mg/m ³ TWA: 1 mg/m ³

Appropriate engineering controls

Engineering Controls Use mechanical system if in closed storage area.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Goggles. Face shield.

Skin and body protection Rubber gloves. Suitable protective clothing.

Respiratory protection Ensure adequate ventilation, especially in confined areas. If mist is present, a fitted mask is recommended.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling. Dispose of any work clothes which have been overly exposed to liquid.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Oily liquid	Odor	Characteristic
Appearance	Dark Colored	Odor threshold	Not determined
Color	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Approximately 0.9	
Melting point/freezing point	300 °C / 572 °F	
Boiling point/boiling range	Not determined	
Flash point	Not determined	
Evaporation rate	Not determined	
Flammability (solid, gas)	Not determined	
Flammability Limits in Air		
Upper flammability limits	Not determined	
Lower flammability limit	Not determined	
Vapor pressure	Not determined	
Vapor density	Not determined	
Specific Gravity	1.104-1.110	
Water solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic viscosity	Not determined	

Explosive properties Not determined
Oxidizing properties Not determined

Other Information

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Keep out of reach of children.

Incompatible materials

Bases. Zinc.

Hazardous Decomposition Products

Prolonged temperatures above 300 degrees C will eventually evaporate the water, and Sulfur Trioxide will be given off.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May be harmful by inhalation.
Eye contact Causes serious eye damage.
Skin Contact Contact causes severe skin irritation and possible burns.
Ingestion Can cause irritation and corrosive burns to mouth, throat, and stomach.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Buffered Sulfuric acid 7664-93-9	2140 mg/kg (Rat)	-	347 ppm (Rat) 1 h 510 mg/m ³ (Rat) 2 h

Information on physical, chemical and toxicological effects

Symptoms Inhalation of fumes or acid mist can cause irritation or corrosive burns to the upper respiratory system, including nose, mouth and throat.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Note: The agencies below have listed Strong Inorganic Acid Mists, Containing Sulfuric Acid as a known carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Buffered Sulfuric acid 7664-93-9	A2	Group 1	Known	X

Numerical measures of toxicity- Product

Not determined

The following values are calculated based on chapter 3.1 of the GHS document .

- ATEmix (oral) 14265 mg/kg
- ATEmix (inhalation-gas) 2313 mg/l
- ATEmix (inhalation-dust/mist) 5.4 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Buffered Sulfuric acid 7664-93-9		>500: 96 h Brachydanio rerio mg/L LC50 static		29: 24 h Daphnia magna mg/L EC50

Persistence and degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined.

Other adverse effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	California Hazardous Waste Status
Buffered Sulfuric acid 7664-93-9	Toxic Corrosive

14. TRANSPORT INFORMATION

DOT

- UN/ID No UN1760
- Proper shipping name Corrosive liquid, n.o.s. (sulfuric acid)
- Hazard Class 8
- Packing Group III

IATA

UN/ID No UN1760
Proper shipping name Corrosive liquid, n.o.s. (sulfuric acid)
Hazard Class 8
Packing Group III

IMDG

UN/ID No UN1760
Proper shipping name Corrosive liquid, n.o.s. (sulfuric acid)
Hazard Class 8
Packing Group III

15. REGULATORY INFORMATION

International Inventories

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances IECSC
- China Inventory of Existing Chemical Substances KECL -
Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Buffered Sulfuric acid - 7664-93-9	7664-93-9	20-25	1.0

SARA 311/312 Hazard Categories

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Buffered Sulfuric acid 7664-93-9	1000 lb			X

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Buffered Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations

Chemical Name	California Proposition 65
Buffered Sulfuric acid - 7664-93-9	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Buffered Sulfuric acid 7664-93-9	X	X	X

U.S. EPA Label Information

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards Not determined	Flammability Not determined	Instability Not determined	Special Hazards Not determined
<u>HMIS</u>	Health hazards Not determined	Flammability Not determined	Physical hazards Not determined	Personal protection Not determined

Issue Date 01-May-1993

Revision Date 29-Nov-2012

Revision Note

new format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet