



# SAFETY DATA SHEET

Issue Date 01-Mar-1996

Revision Date 21-Dec-2012

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Condor Digester

### Other means of identification

**SDS #** BARCODE ES-05

**UN/ID No** UN1760

### Recommended use of the chemical and restrictions on use

**Recommended Use** Ion exchange resin and surfactants in sulfuric acid.

### Details of the supplier of the safety data sheet

#### Supplier Address

Earth Science Products  
23735 NE Airport Rd.  
Aurora, OR 97002 USA  
Mailing address:  
PO Box 327  
Wilsonville, OR 97070

#### 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

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A

### Signal word

**Danger**

### Hazard statements

Harmful if inhaled  
Causes severe skin burns and eye damage  
May cause cancer



**Appearance** Oily, dark colored liquid

**Physical state** liquid

**Odor** Characteristic

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling

**Precautionary Statements - Response**

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

**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	78	*
Buffered Sulfuric Acid	7664-93-9	20	*
Natural ion exchange polymers*	Proprietary	2	*

Chemical Additions \*natural ion exchange polymers, colloidal dispersants, and sulphonated surfactants

**4. FIRST AID MEASURES**

**First aid measures**

**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a POISON CENTER or doctor/physician if you feel unwell.

<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. If conscious, give several glasses of milk (preferred) or water.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Exposed individuals may experience eye tearing, redness and discomfort. Contact may cause irritation and redness. May cause irritation to the mucous membranes and upper respiratory tract.
-----------------	---

**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically.
---------------------------	------------------------

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water or other suitable agent for fires adjacent to non-leaking containers.

<b>Small Fire</b>	Dry chemical.
-------------------	---------------

**Unsuitable Extinguishing Media** Avoid using solid water streams near ruptured tanks.

**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**

<b>Personal precautions</b>	Use personal protective equipment as required. Ensure adequate ventilation. No smoking in spill area.
-----------------------------	---

**Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
--------------------------------	---

<b>Methods for cleaning up</b>	Dilute small spills or leaks with plenty of water. If in a confined area, neutralize residue with alkali such as soda ash or lime. Keep in suitable, closed containers for disposal.
--------------------------------	--

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Use only in well-ventilated areas. Do not breathe dust/fume/gas/mist/vapors/spray. 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. Store locked up. Protect container from physical damage. Protect from direct sunlight. Protect from freezing.

**Incompatible materials** Contact with reactive metals, such as zinc, will result in the evolution of hydrogen. Strong bases.

**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 <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

**Individual protection measures, such as personal protective equipment**

- Eye/face protection** Goggles. Face shield.
- Skin and body protection** Rubber clothing is adequate. Wear protective gloves. (neoprene rubber, Nitrile rubber, polyvinyl chloride, Viton, barrier laminate, or butyl rubber).
- Respiratory protection** Use NIOSH/MSHA approved respirator if misting product.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Characteristic
<b>Appearance</b>	Oily, dark colored liquid	<b>Odor threshold</b>	Not determined
<b>Color</b>	Darkly colored		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	~0.9	
<b>Melting point/freezing point</b>	Not determined	
<b>Boiling point/boiling range</b>	Not available	
<b>Flash point</b>	Not flammable	
<b>Evaporation rate</b>	Not available	
<b>Flammability (solid, gas)</b>	n/a-liquid	
<b>Flammability Limits in Air</b>		
<b>Upper flammability limits</b>	Not applicable	
<b>Lower flammability limit</b>	Not applicable	
<b>Vapor pressure</b>	Not determined	
<b>Vapor density</b>	Not available	
<b>Specific Gravity</b>	1.13 Min	(1=water)

<b>Water solubility</b>	Completely soluble
<b>Solubility in other solvents</b>	Not determined
<b>Partition coefficient</b>	Not determined
<b>Autoignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not determined
<b>Kinematic viscosity</b>	Not determined
<b>Dynamic viscosity</b>	Not determined
<b>Explosive properties</b>	Not determined
<b>Oxidizing properties</b>	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**

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

**Incompatible materials**

Contact with reactive metals, such as zinc, will result in the evolution of hydrogen. Strong bases.

**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**

<b>Inhalation</b>	Harmful if inhaled.
<b>Eye contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns.
<b>Ingestion</b>	Do not taste or swallow.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Buffered Sulfuric acid 7664-93-9	2140 mg/kg ( Rat )	-	347 ppm ( Rat ) 1 h 510 mg/m <sup>3</sup> ( Rat ) 2 h

**Information on physical, chemical and toxicological effects**

**Symptoms** Exposed individuals may experience eye tearing, redness and discomfort. Contact may cause irritation and redness. May cause irritation to the mucous membranes and upper respiratory tract.

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

**Carcinogenicity** May cause cancer. 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) 10695 mg/kg

ATEmix (inhalation-dust/mist) 2.6 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
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. Dilute and waste irrigate as per the Manufacturer's instructions for applications.

**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	1.0

**SARA 311/312 Hazard Categories**

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

  

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

**Issue Date** 01-Mar-1996

**Revision Date** 21-Dec-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**