

MATERIAL SAFETY DATA SHEET

(USA)

(Complies with USA OSHA 29 CFR 1910.1200 and ANSI Z 400.1)

Version: 4

Revision date: 15 April 2010

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product code: J475
Product name: EB-CLEAN* J475 Breaker
Company identification: Schlumberger Technology Corporation
110 Schlumberger Drive
Sugar Land, Texas 77478, USA
Telephone: 1-281-285-7873
Emergency telephone number: USA: +1-281-595-3518 (24hr)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

Main physical hazards: Oxidizer.
Main health hazards: May cause allergic reaction upon repeated skin exposure. May cause allergic reaction upon repeated inhalation exposure. Harmful if swallowed. May cause eye irritation. May cause respiratory tract irritation. Causes irritation if swallowed. May cause skin irritation.
Other Information: Violent reaction in contact with acids, reducing agents, organic materials, aluminum, copper. May ignite combustible materials in contact with water or moist air.
Precautions: Explosive with dry bromates. May ignite combustible materials in contact with water or moist air. Keep container tightly closed.
HMIS classification: Health: **3** Flammability: **1** Physical hazard: **2**

Form: Granules

Color: White

Odor: Mild Sweet

Principle routes of exposure:

Eye contact. Skin contact. Inhalation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %- Range
Diammonium peroxodisulphate	7727-54-0	60 - 100

4. FIRST AID MEASURES

Eye contact: Immediately flush eyes with water for 15 minutes while holding eyelids open. Seek medical attention.

Skin contact: Wash off with soap and water. Rinse immediately with plenty of water for at least 15 minutes. Seek medical attention if irritation occurs.

Ingestion:	Do not induce vomiting without medical advice. Call a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person.
Inhalation:	Move to fresh air. Call a physician immediately. If not breathing, give artificial respiration.
Additional first aid remarks:	Do not attempt to neutralize with basic or halide containing materials. Effects are related to oxidizing properties.

5. FIRE-FIGHTING MEASURES

Fire hazard:	This material does not burn, but as an oxidizer it will support combustion of other materials.
Flash point:	Not applicable.
Autoignition temperature:	Not applicable.
Flammability limits in air:	
Lower:	Not applicable
Upper:	Not applicable
Oxidizing properties:	Oxidizer.
Reactivity data:	Explosive with dry bromates.

Suitable extinguishing media:
Deluge with water. Other methods not effective.

Extinguishing media which must not be used for safety reasons:
None known.

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:

Oxygen. Hydrogen chloride. When heated strongly or burned, oxides of carbon and harmful organic chemical fumes are released. Explosive with dry bromates.

Special protective equipment for firefighters:

Wear protective fire fighting clothing and avoid breathing vapors. Use self-contained breathing apparatus in closed areas.

NFPA rating:	
Health:	3
Flammability:	1
Instability:	2
Special:	Oxidizer

6. ACCIDENTAL RELEASE MEASURES

Main physical hazards:	Oxidizer.
Other Information:	Violent reaction in contact with acids, reducing agents, organic materials, aluminum, copper. May ignite combustible materials in contact with water or moist air.
Personal precautions:	Do not get on skin or clothing. Wash thoroughly after handling. Wear suitable protective equipment.
Methods for cleaning up:	Shovel into suitable container for disposal. Keep away from combustible material.
Environmental precautions:	Keep out of waterways. Prevent product from entering drains.

7. HANDLING AND STORAGE

Handling:

Precautions: Explosive with dry bromates. May ignite combustible materials in contact with water or moist air. Keep container tightly closed.

Safe handling advice: Do not breathe dust. Avoid contact with skin and eyes. Wash contaminated clothing before re-use.

Technical measures/ storage conditions:

Do not store, transport with or allow to contact dry bromates. Keep material dry. Store in well ventilated area out of direct sunlight. Storage temperature not to exceed 43 °C (110 °F).

Packaging requirements:

Pail with resealable inner polyethylene bag.

Incompatible products:

Organics. Strong acids. Water. Metals. Do not store, transport with or allow to contact combustible materials, corrosives, reducing agents or dry bromates. Halides. See also Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure: Control the source. Enclosure of the process. Other suitable methods.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wear suitable protective equipment.

Respiratory protection: Use NIOSH approved respirator with dust and mist protection (3M 8210).

Eye protection: Tightly fitting safety goggles.

Hand protection: Impervious gloves made of. PVC. Rubber gloves.

Skin and body protection: Chemical resistant apron. For spills and emergencies, also wear boots and impervious suit.

Occupational Exposure Limits

Component	ACGIH - TLVs			OSHA - PELs		
	TWA / Ceiling	STEL	ACGIH - Skin	TWA / C	STEL	Final PELs - Skin
Diammonium peroxidisulphate	-	-	-	-	-	-

Particles Not Otherwise Regulated/Specified [PNOR or PNOS] (insoluble or poorly soluble):

- OSHA PEL's for Inert or Nuisance Dust are covered by PNOR limits: respirable fraction: 5 mg/m³; total dust 15 mg/m³.

ACGIH PNOS Recommendations: airborne concentrations should be kept below 3 mg/m³, respirable particulate, and 10 mg/m³, inhalable particles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical characterization:	Oxidizer. Resin-coated inorganic material.
Fire hazard:	This material does not burn, but as an oxidizer it will support combustion of other materials.
Form:	Granules
Color:	White
Odor:	Mild Sweet
Odor threshold:	Not applicable.
pH:	6.5 - 8
pH concentration:	@ 10 g/l
Boiling point/range:	Decomposes
Flash point:	Not applicable.
Flammability limits in air:	
Lower:	Not applicable
Upper:	Not applicable
Bulk density:	1150 kg/m ³
Melting point/range:	Decomposes @120 °C
Decomposition temperature:	120 °C / 248 °F
Solubility:	
Water solubility:	10 - 20 g/l (@ 20°C)
Fat solubility:	No information available.
Partition coefficient (n-octanol/water):	No information available.
Relative density:	1.8 (@ 20°C)
Vapor pressure:	Not applicable.
Vapor density:	Not applicable.
Viscosity:	Not applicable.
Evaporation rate:	Not applicable.
% Volatile (VOC):	None.

10. STABILITY AND REACTIVITY**Stability:**

May release hydrogen chloride above 120 F (49 C).

Conditions to avoid:

Decomposes with heat.

Incompatibility with other substances:

Acids, moisture, reducing agents, organics, bases, combustible materials, dry bromates. Halides.

Hazardous decomposition products:

Oxygen. Hydrogen chloride. When heated strongly or burned, oxides of carbon and harmful organic chemical fumes are released. Sulfur oxides. Nitrogen Oxides (NOx). Explosive with dry bromates.

Hazardous polymerization:

Hazardous polymerization does not occur.

Other Information:

Violent reaction in contact with acids, reducing agents, organic materials, aluminum, copper. May ignite combustible materials in contact with water or moist air.

11. TOXICOLOGICAL INFORMATION

PRODUCT TOXICOLOGICAL INFORMATION

Acute Health Hazard

Eye contact:	Irritant. May cause pain, redness, discomfort.
Skin contact:	Irritant; may cause pain, redness, dermatitis.
Ingestion:	Harmful if swallowed; large amounts may cause illness. Irritant; may cause pain or discomfort to mouth, throat and stomach.
Inhalation:	Irritant; may cause pain and coughing.
Sensitization - lung:	May cause allergic reaction upon repeated inhalation exposure.
Sensitization - skin:	May cause sensitization by skin contact.
Toxicologically synergistic products:	None known.

Chronic Health Hazard

Carcinogenic effects:	None known.
Mutagenic effects:	Not known to cause heritable genetic damage.
Teratogenic effects:	Not known to cause birth defects or have a deleterious effect on a developing fetus.
Reproductive toxicity:	Not known to adversely affect reproductive functions and organs.
Target organ effects:	None known.

COMPONENT TOXICOLOGICAL INFORMATION

Component	Target Organ Effects	LD50 / LC50
Diammonium peroxidisulphate	-	= 520 mg/L (Inhalation LC50; Rat) 1 h = 495 mg/kg (Oral LD50; Rat)

Component	IARC Group 1 or 2:	ACGIH - Carcinogens:	OSHA Listed Carcinogens	NTP:
Diammonium peroxidisulphate	-	-	-	-

12. ECOLOGICAL INFORMATION

PRODUCT INFORMATION

COMPONENT INFORMATION

Diammonium peroxidisulphate	
Bioaccumulation:	Not applicable
Persistence / degradability:	Not applicable.
Crustacean toxicity:	48h LC50= 21 mg/l (Acartia tonsa)
Freshwater Fish Species Data	LC50 96 h (Lepomis macrochirus) = 103 mg/L LC50 96 h (Oncorhynchus mykiss) = 76.3 mg/L LC50 96 h (Poecilia reticulata) = 323 mg/L
Water Flea Data:	EC50 48 h (Daphnia magna) = 120 mg/L

13. DISPOSAL CONSIDERATIONS**Waste from residues / unused products:**

Ship via permitted waste hauler to permitted hazardous waste disposal facility for chemical deactivation and solidification prior to land filling.

Contaminated packaging:

Send empty bags to sanitary landfill. Render other types of containers unuseable by puncturing or crushing and sanitary landfill unless prohibited by local regulations.

EPA RCRA Hazardous Waste Code:

D001

14. TRANSPORT INFORMATION**DOT:**

UN/NA Number:	UN 1444
CERCLA RQ:	Not established
Hazard class:	5.1
Proper shipping name:	Ammonium persulfate mixture, 5.1, UN 1444, PG III
Label(s):	Oxidizer 5.1

IMDG/IMO

Shipping name:	AMMONIUM PERSULPHATE Mixture
Label(s):	Oxidizer 5.1
Class or Div.:	5.1
UN number:	UN 1444
Packing group:	III
EMS:	F-A, S-Q

ICAO/IATA

Shipping name:	Ammonium persulfate mixture	
Label(s):	Oxidizer 5.1	
Class or Div.:	5.1	
UN number:	UN 1444	
Packing group:	III	
Packing instruction (passenger aircraft):	516	Max Net Qty/Pkg: 25 kg
Packing instruction (cargo aircraft):	518	Max Net Qty/Pkg: 100 kg

TDG (Canada):

Shipping name:	AMMONIUM PERSULFATE MIXTURE, 5.1, UN 1444, PG III
Label(s):	Oxidizer 5.1
PIN:	UN 1444
Class:	5.1
Packing group:	III

Note 1:

For the applicable placard selection refer to the appropriate transport regulations; the selection may vary depending on the cargo size and categories of other hazardous materials in the cargo.

15. REGULATORY INFORMATION**International Chemical Inventories**

USA, Toxic Substances Control Act inventory (TSCA): This product complies with TSCA requirements.

IMPORTS, USA: No import volume restrictions.

Canada, Domestic Substance List (DSL): This product complies with DSL requirements.

IMPORTS, Canada: No import volume restrictions.

U.S.A. Regulations

OSHA Hazard Communication Standard:
(Complies with USA OSHA 29 CFR 1910.1200 and ANSI Z 400.1)

EPA RCRA Hazardous Waste Code:
D001

EPA, Sections 311 and 312 - Material Safety Data Sheet Requirements (40 CFR 370):

Immediate (Acute) Health Hazard:	YES
Delayed (Chronic) Health Hazard:	None
Fire Hazard:	YES
Sudden Release or Pressure Hazard:	None
Reactive Hazard:	None

EPA, Sections 313 - List of Toxic Chemicals (40 CFR 372):
This product contains the following substance(s), which appear(s) on the List of Toxic Chemicals:

Additional Regulatory Information

Diammonium peroxodisulphate

EPA, CERCLA Section 102a/103 Hazardous Substances (40 CFR 302.4): None

CERCLA/SARA - Hazardous Substances and their RQs: None

EPA, SARA TITLE III Section 304, Extremely Hazardous Substances (40 CFR 355.40): None

California Proposition 65: None

International Hazard Class**WHMIS Hazard Class:**

C (OXIDIZING MATERIAL)

D2A (Other Toxic Effects - Very Toxic Material)

D2B (Other Toxic Effects - Toxic Material)

16. OTHER INFORMATION**Current references:**

1. Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices. *American Conference of Governmental Industrial Hygienists, Cincinnati OH.*
2. IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. *World Health Organization, International Agency for Research on Cancer. Geneva, Switzerland.*
3. Annual Report on Carcinogens. National Toxicology Program. *U.S. Department of Health and Human Services, Public Health Service.*
4. NIOSH Registry of Toxic Effects of Chemical Substances (RTECS). *National Institute for Occupational Safety and Health. Cincinnati, OH.*
5. LOLI Database.

Explanation of terms:

ACGIH:	American Conference of Governmental Industrial Hygienist
ACGIH-TL:	Threshold Limit Value
DSL:	Domestic Substance List
HMIRC:	Hazardous Materials Information Review Commission
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
NIOSH:	National Institute of Occupational Safety & Health
NIOSH-REL:	Recommended Exposure Limit
OSHA:	Occupational Safety & Health Administration
OSHA-PEL:	Permissible Exposure Limit
TSCA:	Toxic Substance Control Act (Inventory)

Occupational Exposure Limits indicators: TWA - Time Weighted Average; STEL - Short Term Limit; C - Ceiling Limit; units: [mg/m³]

ACGIH Notations:

"Skin" refers to the potential significant contribution to the overall exposure by the cutaneous route, including mucous membranes and the eyes, either by contact with vapors or by direct skin contact with the substance.

"A" notation indicates carcinogenicity as follows:

ACGIH classification: A1 - Confirmed Human Carcinogen; A2 - Suspected Human Carcinogen; A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; A4 - Not Classifiable as a Human Carcinogen; A5 - Not suspected as a Human Carcinogen.

"SEN" refers to the potential for an agent to product sensitization as confirmed by human and animal data.

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End of the Material Safety Data Sheet