

## Safety Data Sheet EB-Clean\* J475 Breaker

### 1. Identification of the substance/preparation and of the Company/undertaking

#### 1.1 Product identifier

Product name EB-Clean\* J475 Breaker  
Product code J475  
Denmark Pr. no. 1008929

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

Recommended use Used as a fracturing additive in oilfield applications

Uses advised against Consumer use

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

Supplier identification  
Schlumberger Oilfield UK PLC  
Victory House, Churchill Court  
Manor Royal, Crawley  
West Sussex RH10 9LU  
+ 47 51577424  
SDS@slb.com

#### 1.4 Emergency Telephone Number

Emergency telephone - (24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 595 3518

Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Croatia	01-23-48-342( for medical information) -Center for Poison

### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008

##### Health hazards

Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitisation	Category 1
Skin sensitisation	Category 1
Specific target organ toxicity (single exposure)	Category 3

Environmental hazards Not classified

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**Physical Hazards**

Oxidizing Solids	Category 3
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**2.2 Label Elements****Signal word**

DANGER

**Hazard statements**

H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H335 - May cause respiratory irritation  
H272 - May intensify fire; oxidizer

**Precautionary Statements - EU (§28, 1272/2008)**

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray  
P280 - Wear protective gloves/protective clothing and eye/face protection  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell  
P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing  
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician

**Supplementary precautionary statements**

P221 - Take any precaution to avoid mixing with combustibles  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P285 - In case of inadequate ventilation wear respiratory protection  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P304 + P341 - IF INHALED: If breathing is difficult, 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  
P330 - Rinse mouth  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention  
P337 + P313 - If eye irritation persists: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before re-use  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P501 - Dispose of contents/ container to an approved waste disposal plant

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

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**Indication of danger**

O - Oxidizing  
Xn - Harmful  
Xi - Irritant

**R-code(s)**

Xn;R22 - Xi;R36/37/38 - R42/43 - O;R8

**Contains**

Diammonium peroxodisulphate

*For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.*

**2.3 Other data**

Not classified as PBT/vPvB by current EU criteria

### 3. Composition/information on ingredients

**3.1 Substances**

Not Applicable

**3.2 Mixtures**

Component	EC-No.	CAS-No	Weight % - range	Classification (67/548)	Classification (Reg. 1272/2008)	REACH registration number
Diammonium peroxodisulphate	231-786-5	7727-54-0	60 - 100	Xn; R22 Xi; R36/37/38 R42/43 O; R8	Ox. Sol.3 (H272) Acute Tox.4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens.1 (H317) STOT SE 3 (H335)	No data available

**Comments**

The product contains other ingredients which do not contribute to the overall classification.

### 4. First aid measures

**4.1 First Aid****Inhalation**

If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get immediate medical attention.

**Ingestion**

Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical attention.

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<b>Skin contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Seek medical attention.
<b>Eye contact</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get immediate medical attention.

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

<b>General advice</b>	The severity of the symptoms described will vary dependant of the concentration and the length of exposure. If adverse symptoms develop, the casualty should be transferred to hospital as soon as possible.
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**Main symptoms**

<b>Inhalation</b>	Please see Section 11. Toxicological Information for further information.
<b>Ingestion</b>	Please see Section 11. Toxicological Information for further information.
<b>Skin contact</b>	Please see Section 11. Toxicological Information for further information.
<b>Eye contact</b>	Please see Section 11. Toxicological Information for further information.

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

<b>Notes to physician</b>	Treat symptomatically.
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**5. Fire-fighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

**Extinguishing media which shall not be used for safety reasons**

High volume water jet.

**5.2 Special hazards arising from the substance or mixture****Unusual fire and explosion hazards**

May intensify fire; oxidiser.

**Hazardous combustion products**

Heating or fire can release toxic gas.

**5.3 Advice for firefighters****Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus and full protective gear.

**Special Fire-Fighting Procedures**

Containers close to fire should be removed immediately or cooled with water.

**6. Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. See also section 8. Do not breathe dust. Avoid contact with the skin and the eyes.

### **6.2 Environmental precautions**

The product should not be allowed to enter drains, water courses or the soil.

#### **Environmental exposure controls**

Avoid release to the environment. Local authorities should be advised if significant spillages cannot be contained.

### **6.3 Methods and materials for containment and cleaning up**

#### **Methods for Containment**

Prevent further leakage or spillage if safe to do so.

#### **Methods for cleaning up**

Take up mechanically and collect in suitable container for disposal. After cleaning, flush away traces with water.

### **6.4 Reference to other sections**

See section 13 for more information.

## **7. Handling and storage**

### **7.1 Precautions for safe handling**

#### **Handling**

Avoid breathing dust; if exposed to high dust concentration, leave area immediately. Avoid contact with skin and eyes. Avoid handling causing generation of dust. Keep away from open flames, hot surfaces and sources of ignition.

#### **Hygiene measures**

Use good work and personal hygiene practices to avoid exposure. Wash hands and face before breaks and immediately after handling the product. Remove contaminated clothing. Do not eat, drink or smoke when using this product.

### **7.2 Conditions for safe storage, including any incompatibilities**

#### **Technical measures/precautions**

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from heat, sparks, and flame. Keep containers in cool areas out of direct sunlight and away from combustibles.

#### **Storage precautions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at a temperature not exceeding 110°F / 43 °C. Incompatible with strong acids and bases. Strong reducing agents. Heavy metals. Protect from moisture.

### **7.3 Specific end uses**

See also Section 1.2.

## **8. Exposure controls/personal protection**

### **8.1 Control parameters**

Component	EU OEL - Third List	Austria	Australia	Denmark
Diammonium peroxodisulphate	Not determined	Not determined	Not determined	Not determined

  

Component	Malaysia	France	Germany	Hungary
Diammonium peroxodisulphate	0.1 mg/m <sup>3</sup> TWA	Not determined	Not determined	Not determined

  

Component	New Zealand	Italy	Netherlands	Norway
Diammonium peroxodisulphate	Not Determined	Not determined	Not determined	Not determined

  

Component	Poland	Portugal	Romania	Russia
Diammonium peroxodisulphate	Not determined	Not determined	Not determined	Not determined

  

Component	Spain	Switzerland	Turkey	UK
Diammonium peroxodisulphate	0.1 mg/m <sup>3</sup> VLA-ED	Not determined	Not determined	Not determined

## 8.2 Exposure controls

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

### Engineering measures to reduce exposure

Ensure adequate ventilation. Mechanical ventilation or local exhaust ventilation is required.

### Personal protective equipment

#### Eye protection

It is good practice to wear goggles when handling any chemical. Wear dust resistant safety goggles where there is a danger of eye contact.

#### Hand protection

Polyvinyl alcohol or nitrile-butyl rubber gloves.

#### Respiratory protection

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust), Effective dust mask.

#### Skin and body protection

Wear appropriate personal protective clothing to prevent skin contact, Eye wash and emergency shower must be available at the work place.

### Hygiene measures

Wash hands before breaks and immediately after handling the product, Remove and wash contaminated clothing before re-use.



## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder
Odour	Sweet
Colour	White
Odor threshold	Not applicable

Property	Values	Remarks
pH		
pH @ dilution	6.5 - 8	@ 10g/l
Melting/freezing point	Decomposes	
Boiling point/range	No information available	
Flash Point	No information available	
Evaporation rate		
Flammability (solid, gas)	Not Applicable	
Flammability Limits in Air		
Upper flammability Limit	Not applicable	
Lower flammability limit	Not applicable	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	1.8 @ 20°C	
Bulk density	1150 kg/m³	
Relative density	No information available	
Water solubility	10 - 20 g/l	@ 20 °C
Solubility in other solvents	No information available	
Autoignition temperature	No information available	
Decomposition temperature	120 °C/ 248 °F	
Kinematic viscosity		
Viscosity, dynamic	No information available	
Log Pow	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

### 9.2 Other information

Pour point	No information available
Molecular weight	No information available
VOC content(%)	No information available
Density VALUE	No information available

## 10. Stability and reactivity

### 10.1 Reactivity

May intensify fire; oxidizer.

## **10.2 Chemical stability**

Stable under normal temperature conditions and recommended use.

## **10.3 Possibility of Hazardous Reactions**

### **Hazardous polymerization**

Hazardous polymerisation does not occur.

## **10.4 Conditions to avoid**

Heat, flames and sparks. Keep away from sources of ignition - No smoking. Protect from moisture. Avoid dust formation. Avoid strong sunlight.

## **10.5 Incompatible materials**

Incompatible with strong acids and bases. Metal salts. Reducing agents.

## **10.6 Hazardous decomposition products**

See also section 5.2.

# **11. Toxicological information**

## **11.1 Information on toxicological effects**

### **Acute toxicity**

#### **Product information**

May produce an allergic reaction.

#### **Inhalation**

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause irritation of respiratory tract. May cause drowsiness or dizziness.

#### **Eye contact**

Causes serious eye irritation.

#### **Skin contact**

Irritating to skin. May cause an allergic skin reaction.

#### **Ingestion**

Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diammonium peroxodisulphate	= 495 mg/kg ( Rat )	No data available	= 520 mg/L ( Rat ) 1 h

#### **Sensitisation**

May cause sensitization by inhalation and skin contact.

#### **Mutagenic effects**

This substance has no evidence of mutagenic properties.

#### **Carcinogenicity**

This substance has no evidence of carcinogenic properties.

<b>Reproductive toxicity</b>	No information available.
<b>Developmental toxicity</b>	Not known to cause birth defects or have a deleterious effect on a developing fetus.
<b>Routes of exposure</b>	Inhalation. Skin contact. Eye contact.
<b>Routes of entry</b>	Inhalation.
<b>Specific target organ toxicity (single exposure)</b>	Category 3
<b>Specific target organ toxicity (repeated exposure)</b>	Not classified.
<b>Target organ effects</b>	Respiratory system.
<b>Aspiration hazard</b>	No hazard from product as supplied.

## 12. Ecological information

### 12.1 Toxicity

The product component(s) are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

#### Toxicity to algae

See component information below.

#### Toxicity to fish

See component information below.

#### Toxicity to daphnia and other aquatic invertebrates

See component information below.

Component	Toxicity to fish	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates
Diammonium peroxodisulphate	323 mg/L LC50 (Poecilia reticulata) = 96 h 76.3 mg/L LC50 (Oncorhynchus mykiss) = 96 h 103 mg/L LC50 (Lepomis macrochirus) = 96 h	No information available	120 mg/L EC50 (Daphnia magna) = 48 h

### 12.2 Persistence and degradability

No product level data available.

### 12.3 Bioaccumulative potential

Does not bioaccumulate.

#### **12.4 Mobility in soil**

##### **Mobility**

The product is water soluble, and may spread in water systems.

#### **12.5 Results of PBT and vPvB assessment**

Not classified as PBT/vPvB by current EU criteria.

#### **12.6 Other adverse effects.**

None known.

### **13. Disposal considerations**

#### **13.1 Waste treatment methods**

<b>Waste from residues / unused products</b>	Dispose of as special waste in compliance with local and national regulations.
<b>Contaminated packaging</b>	Dispose of contents/container to an approved waste disposal plant.
<b>EWC waste disposal No.</b>	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The following Waste Codes are only suggestions: EWC waste disposal No: 16 10 01

### **14. Transport information**

#### **14.1 UN number**

<b>UN/ID No. (ADR/RID/ADN/ADG)</b>	UN 1444
<b>UN No. (IMDG)</b>	UN 1444
<b>UN No. (ICAO)</b>	UN 1444

#### **14.2 Proper shipping name** AMMONIUM PERSULFATE,

#### **14.3. Hazard class(es)**

<b>ADR/RID/ADN Hazard class</b>	5.1
<b>IMDG Hazard class</b>	5.1
<b>ICAO Hazard class/division</b>	5.1

#### **14.4 Packing group**

<b>ADR/RID/ADN Packing Group</b>	III
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IMDG Packing group                      III  
ICAO Packing group                    III



#### 14.5 Environmental hazard

Marine pollutant  
No

#### 14.6 Special precautions

EmS (IMDG)                                F-A, S-Q  
Tunnel restriction code                E

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
Please contact SDS@slb.com for info regarding transport in Bulk.

### 15. Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Germany, Water Endangering        Hazardous to water/Class 1  
Classes (VwVwS)

Australian Standard for the Uniform Scheduling of Drugs and Poisons

Diammonium peroxodisulphate  
Schedule 6

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

This safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008.

#### International inventories

USA, Toxic Substances Control Act inventory (TSCA)	Complies
European Union - EINECS and ELINCS	Complies
Canada, Domestic Substance List (DSL)	Complies

Philippines (PICCS)	Complies
Inventory - Japan - Existing and New Chemicals list	Complies
China (IECSC)	Complies
Australia (AICS)	Complies
Korea (KECL)	Complies
Inventory - New Zealand - Inventory of Chemicals (NZIoC)	Complies

#### **15.2 Chemical Safety Report**

No information available

### **16. Other information**

<b>Prepared by</b>	Global Regulatory Compliance - Chemicals (GRC - Chemicals) , Ingrid Helland
<b>Supersedes date</b>	30/Sep/2013
<b>Revision date</b>	21/May/2015
<b>Version</b>	2
<b>The following sections have been revised</b>	SDS fully updated in the new database, Updated according to GHS/CLP.

#### **Text of R phrases mentioned in Section 3**

R 8 - Contact with combustible material may cause fire.  
R22 - Harmful if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin  
R42/43 - May cause sensitization by inhalation and skin contact

#### **Full text of H-Statements referred to under sections 2 and 3**

H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H335 - May cause respiratory irritation

#### **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 guide 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.