

Safety Data Sheet

PolyBreak SP

SECTION 1: Identification

1.1 Product identifier

Product name PolyBreak SP
Product number PBSP

1.3 Recommended use of the chemical and restrictions on use

For industrial use. Polymer breaker.

1.4 Supplier's details

Name Downhole Chemical Solutions
Address 1 Cowboys Way #572
Frisco Texas 75034

Telephone 469-466-1100

1.5 Emergency phone number(s)

1-800-255-3924 US (ChemTel)
1-813-248-0585 International (ChemTel)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)

- Acute toxicity, oral, Cat. 4
- Skin corrosion/irritation, Cat. 2
- Serious eye damage/eye irritation, Cat. 2A
- Respiratory sensitizer, Cat. 1
- Skin sensitizer, Cat. 1
- Specific target organ toxicity following single exposure, Cat. 3
- Oxidizing solids, Cat. 3

2.2 GHS label elements, including precautionary statements

Pictogram



Hazard statement(s)

H302 Harmful if swallowed
H272 May intensify fire; oxidizer
H315 Causes skin irritation
H319 Causes serious eye irritation

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H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H317 May cause an allergic skin reaction
 H335 May cause respiratory irritation
 H336 May cause drowsiness or dizziness

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P220 Keep/Store away from clothing/.../combustible materials.
 P221 Take any precaution to avoid mixing with combustibles
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

P501 Dispose of contents/ container to an approved waste disposal plant
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell,
 P330 Rinse mouth.
 P302+P352 IF ON SKIN: Wash with plenty of soap and water
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
 P285 In case of inadequate ventilation wear respiratory protection.
 P304+P340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P271 Use only outdoors or in a well-ventilated area.
 P312 Call a POISON CENTER or doctor if you feel unwell.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous Component	Concentration
Sodium persulfate (CAS no.: 7775-27-1; EC no.: 231-892-1)	<= 100 % (weight)

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.
 Move out of dangerous area.

If inhaled Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists.

Acute and delayed symptoms and effects: May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.

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In case of skin contact	<p>Wash with plenty of soap and water for at least 15 minutes. Call a poison center or doctor if irritation develops or persists. Take off contaminated clothing and wash it before reuse.</p> <p>Acute and delayed symptoms and effects: May cause an allergic skin reaction. Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.</p>
In case of eye contact	<p>Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.</p> <p>Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.</p>
If swallowed	<p>Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.</p> <p>Acute and delayed symptoms and effects: Harmful if swallowed.</p>

4.2 Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical

Unsuitable extinguishing media: Do not use carbon dioxide or other gas filled fire extinguishers; they will have little effect on decomposing persulfate.

5.2 Specific hazards arising from the chemical

No data available.

5.3 Special protective actions for fire-fighters

Avoid any skin contact. Effects of contact or inhalation may be delayed. Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Further information

Use water spray to cool unopened containers. Contact with combustible material may cause fire

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Warning: Do not touch or walk through spilled material. Keep off any unprotected persons. Avoid contact with the skin and the eyes. Wear respiratory protection if necessary. Avoid dust formation. Avoid breathing gas, mist,

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vapors, or spray. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Do not contaminate water or the environment.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Avoid dust formation. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wetbrushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not swallow. Do not eat, drink or smoke when using this product. Avoid contact with the skin and the eyes. Avoid dust formation. Do not breathe dust, powders, mist, vapors, or spray. Use only outdoors or in a well-ventilated area. Further processing of solid materials may result in the formation of combustible dusts. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. See Section 8 for information on Personal Protective Equipment.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat and sources of ignition. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS: 7775-27-1 (EC: 231-892-1)

Sodium persulfate

ACGIH: 0.1 mg/m³ TLV® inhalation

8.2 Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side shields or goggles and faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear protective gloves, such as PVC or other plastic material. Consult manufacturer specifications for further information.

Body protection

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Wear protective clothing. Clothing with full length sleeves and pants should be worn. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards

No data available.

Environmental exposure controls

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	White fine crystals and fragments
Odor	Odorless
Odor threshold	No data available.
pH	6.0 (1% solution)
Melting point/freezing point	180 °C (Decomposes)
Initial boiling point and boiling range	Decomposes upon heating
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	The product is not flammable.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	1.68 g/cm ³
Solubility(ies)	42 % at 25 °C (77 °F)
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	The substance or mixture is classified as oxidizing with the category 3

Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Contact with incompatible materials. Sources of ignition. Exposure to heat.

10.2 Chemical stability

Stable under normal storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

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Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Alcohol, Strong reducing agents, Strong bases, Powdered metals, Organic materials

10.6 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Sodium persulfate

LD50 Oral - Rat -female - 920 mg/kg

LD50 Oral - Rat -male - 930 mg/kg

LC50 Inhalation - Rat - > 5.1 mg/l

LD50 Skin - Rabbit - > 10,000 mg/kg

Symptoms (including delayed and immediate effects):

Inhalation: May cause respiratory irritation. May cause allergic respiratory reaction.

Ingestion: Harmful if swallowed

Skin corrosion/irritation

Causes skin irritation

Serious eye damage/irritation

Causes serious eye irritation

Respiratory or skin sensitization

Guinea pig: May cause allergic respiratory reaction.

Guinea pig: May cause allergic skin reaction

Germ cell mutagenicity

Did not show mutagenic effects in animal experiments

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

No data available.

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Aspiration hazard

No data available.

Additional information

Allergy, Repeated exposure may cause asthma.

SECTION 12: Ecological information

Toxicity

Sodium persulfate

LC50 - Oncorhynchus mykiss (rainbow trout) - 163 mg/l - 96 h

EC50 - Daphnia magna (water flea) - 133 mg/l - 48 h

EC50 - Pseudokirchneriella subcapitata (green algae) - 116 mg/l - 72 h

Persistence and degradability

Sodium persulfate

The methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulative potential

Does not bioaccumulate.

Mobility in soil

Dissociates into ions.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 13: Disposal considerations

Disposal of the product

The material as supplied is a hazardous waste. Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Disposal of contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN Number: 1505

Class: 5.1

Packing Group: III

Proper Shipping Name: Sodium persulfate

Reportable quantity (RQ):

Poison inhalation hazard: No

IMDG

UN Number: 1505

Class: 5.1

Packing Group: III

Proper Shipping Name: SODIUM PERSULPHATE

EMS Number: F-A, S-Q

IATA

UN Number: 1505

Class: 5.1

Packing Group: III

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Proper Shipping Name: Sodium persulfate

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Reactivity Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

New Jersey Right To Know Components

Common name: SODIUM PERSULFATE

CAS number: 7775-27-1

Pennsylvania Right To Know Components

No components are subject to the Pennsylvania Right To Know Act.

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

HMIS Rating

PolyBreak SP	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	J

SECTION 16: Other information

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Downhole Chemical Solutions be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Downhole Chemical Solutions has been advised of the possibility of such damages.