

Section 1. Identification

Product name : PETROSWEET™ HSO3518 SCAVENGER
™ a trademark of Baker Hughes Incorporated.

Product code : HSO3518

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

Identified uses : Hydrogen Sulfide Scavenger.

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Supplier's details : Baker Petrolite LLC
12645 W. Airport Blvd.
Sugar Land, TX 77478
For Product Information/SDSs Call: 800-231-3606
(8:00 a.m. - 5:00 p.m. CST, Monday - Friday) 281-276-5400

Emergency telephone number (with hours of operation) : CHEMTREC: 800-424-9300 (U.S. 24 hour)
Baker Petrolite: 800-231-3606
(001)281-276-5400
CANUTEC: 613-996-6666 (Canada 24 hours)
CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Flammable liquid and vapor.
Causes serious eye irritation.
Causes skin irritation.
Suspected of damaging fertility or the unborn child.
Suspected of causing cancer.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Avoid release to the environment. Wash hands thoroughly after handling.
- Response** : IF exposed or concerned: Get medical attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Zinc compound	60 - 70	Trade secret.
Light aromatic naphtha	10 - 20	64742-95-6
1,2,4-Trimethylbenzene	5 - 10	95-63-6
2-Butoxyethanol	1 - 5	111-76-2
1,3,5-Trimethylbenzene	1 - 5	108-67-8
1,2,3-Trimethylbenzene	1 - 5	526-73-8
Cumene	0.1 - 1	98-82-8

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Continue to rinse for at least 10 minutes. Check for and remove any contact lenses. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Get medical attention.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Section 4. First aid measures

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : pain or irritation, watering, redness
- Inhalation** : reduced fetal weight, increase in fetal deaths, skeletal malformations
- Skin contact** : irritation, redness, reduced fetal weight, increase in fetal deaths, skeletal malformations
- Ingestion** : reduced fetal weight, increase in fetal deaths, skeletal malformations

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : carbon dioxide, carbon monoxide, metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Dike spill area and do not allow product to reach sewage system or surface or ground water. Notify any reportable spill to authorities. (See section 12 for environmental risks and 13 for disposal information.) Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use only non-sparking tools. Take precautionary measures against electrostatic discharges.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Zinc compound	None.
Light aromatic naphtha	None.
1,2,4-Trimethylbenzene	<p>ACGIH TLV (United States, 4/2014). TWA: 123 mg/m³, 0 times per shift, 8 hours. TWA: 25 ppm, 0 times per shift, 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 125 mg/m³, 0 times per shift, 8 hours. TWA: 25 ppm, 0 times per shift, 8 hours.</p>
2-Butoxyethanol	<p>ACGIH TLV (United States, 4/2014). TWA: 20 ppm, 0 times per shift, 8 hours.</p> <p>OSHA PEL (United States, 2/2013). Absorbed through skin. TWA: 240 mg/m³, 0 times per shift, 8 hours. TWA: 50 ppm, 0 times per shift, 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. TWA: 120 mg/m³, 0 times per shift, 8 hours. TWA: 25 ppm, 0 times per shift, 8 hours.</p>
1,3,5-Trimethylbenzene	<p>ACGIH TLV (United States, 4/2014). TWA: 123 mg/m³, 0 times per shift, 8 hours. TWA: 25 ppm, 0 times per shift, 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 125 mg/m³, 0 times per shift, 8 hours. TWA: 25 ppm, 0 times per shift, 8 hours.</p>
1,2,3-Trimethylbenzene	<p>ACGIH TLV (United States, 4/2014). TWA: 123 mg/m³, 0 times per shift, 8 hours. TWA: 25 ppm, 0 times per shift, 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 125 mg/m³, 0 times per shift, 8 hours. TWA: 25 ppm, 0 times per shift, 8 hours.</p>
Cumene	<p>ACGIH TLV (United States, 4/2014). TWA: 50 ppm, 0 times per shift, 8 hours.</p> <p>OSHA PEL (United States, 2/2013). Absorbed through skin. TWA: 245 mg/m³, 0 times per shift, 8 hours. TWA: 50 ppm, 0 times per shift, 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. TWA: 245 mg/m³, 0 times per shift, 8 hours. TWA: 50 ppm, 0 times per shift, 8 hours.</p>

Consult local authorities for acceptable exposure limits.

If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.

Section 8. Exposure controls/personal protection

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
- Eye/face protection** : Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.
- Hand protection** : Chemical-resistant gloves.
- Skin protection** : Wear long sleeves to prevent repeated or prolonged skin contact.
- Respiratory protection** : If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Colorless.
- Odor** : Aromatic hydrocarbon.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting/freezing point** : Not available.
- Boiling point** : Not available.
- Initial Boiling Point** : Not available.
- Flash point** : Closed cup: 46.111°C (115°F) [SFCC]
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : >1 [Air = 1]
- Relative density** : 1.075 (15.6°C)
- Density** : 8.9548 (lbs/gal)
- Solubility in water** : Insoluble
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic (25°C): <10 cP
- VOC** : Not available.

Section 9. Physical and chemical properties

Pour Point : <-40°C (<-40°F)

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Light aromatic naphtha	LD50 Oral	Rat	2900 mg/kg	-
	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
1,2,4-Trimethylbenzene	LD50 Oral	Rat	5 g/kg	-
	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LD50 Dermal	Guinea pig	>2000 mg/kg	-
	LD50 Dermal	Rabbit	200 mg/kg	-
	LD50 Dermal	Rabbit	99 mg/kg	-
	LD50 Oral	Guinea pig	500 to 2000 mg/kg	-
1,3,5-Trimethylbenzene	LD50 Oral	Rabbit	320 mg/kg	-
	LC50 Inhalation Vapor	Rat	24000 mg/m ³	4 hours
	LD50 Oral	Rat	5000 mg/kg	-
Cumene	LC50 Inhalation Vapor	Mouse	10000 mg/m ³	7 hours
	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	10600 mg/kg	-
	LD50 Oral	Rat	2.9 g/kg	-

Irritation/Corrosion

No applicable toxicity data

Sensitization

No applicable toxicity data

Mutagenicity

No applicable toxicity data

Carcinogenicity

Product/ingredient name	OSHA	IARC	NTP
2-Butoxyethanol	-	3	-
Cumene	-	2B	Reasonably anticipated to be a human carcinogen.

Section 11. Toxicological information

Reproductive toxicity

No applicable toxicity data

Teratogenicity

No applicable toxicity data

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Light aromatic naphtha 1,2,4-Trimethylbenzene	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation
1,3,5-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
1,2,3-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Cumene	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not applicable.

Aspiration hazard

Name	Result
Light aromatic naphtha 1,2,3-Trimethylbenzene Cumene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Dermal, Inhalation.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : Suspected of damaging the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	7508.3 mg/kg
Dermal	34375 mg/kg
Inhalation (vapors)	129.1 mg/l

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
1,2,4-Trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pecteniscrus	48 hours
2-Butoxyethanol	Acute LC50 22.4 mg/l Fresh water	Fish - Tilapia zillii	96 hours
	Acute EC50 >1000 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000 mg/l Marine water	Crustaceans - Chaetogammarus marinus - Young	48 hours
1,3,5-Trimethylbenzene	Acute LC50 1250000 µg/l Marine water	Fish - Menidia beryllina	96 hours
	Acute LC50 12520 to 15050 µg/l Fresh water	Fish - Carassius auratus	96 hours
Cumene	Chronic NOEC 400 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute EC50 2600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute LC50 7400 to 11290 µg/l Fresh water	Crustaceans - Artemia sp.	48 hours
	Acute LC50 30500 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2700 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability





Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN1993	UN1993	UN1993	UN1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Contains: Light aromatic naphtha, 1,2, 4-Trimethylbenzene)	FLAMMABLE LIQUID, N.O.S. (Contains: Light aromatic naphtha, 1,2, 4-Trimethylbenzene)	FLAMMABLE LIQUID, N.O.S. (Contains: Light aromatic naphtha, 1,2, 4-Trimethylbenzene)	FLAMMABLE LIQUID, N.O.S. (Contains: Light aromatic naphtha, 1,2, 4-Trimethylbenzene)
Transport hazard class(es)	3 	3 	3 	3 

Section 14. Transport information

Packing group	III	III	III	III
Environmental hazards	No.	No.	No.	No.
Additional information		Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

DOT Reportable Quantity : Xylene, 1641 gal of this product.

Marine pollutant : Not available.

North-America NAERG : 128

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 12(b) one-time export:** No products were found.
TSCA 12(b) annual export notification: No products were found.
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 307: Zinc compound; Naphthalene
Clean Water Act (CWA) 311: Xylene; Naphthalene

United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :

List name	Status	Ingredient name	Name on list	Conc.
None of the components are listed.				

SARA 302/304 : No products were found.

SARA 311/312

Classification : Fire hazard
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

SARA 313

	Product name	CAS number	%
Supplier notification	Zinc compound	-	60 - 70
	1,2,4-Trimethylbenzene	95-63-6	5 - 10
	2-Butoxyethanol	111-76-2	1 - 5

Canada

Canada (CEPA DSL): : At least one component is not listed in DSL but all such components are listed in NDSL.

Section 16. Other information

[National Fire Protection Association \(U.S.A.\)](#)



History

Date of printing : 7/29/2016

Notice to reader

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.