

## Section 1. Identification

**Product name** : CRO396 CORROSION INHIBITOR  
**Product code** : CRO396

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

**Identified uses** : Corrosion Inhibitor.

**Print date** : 12/13/2016

**Validation date** : 12/13/2016

**Version** : 1.04

**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  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
AQUATIC HAZARD (ACUTE) - Category 2  
AQUATIC HAZARD (LONG-TERM) - Category 2

### GHS label elements

**Hazard pictograms** :



**Signal word** : Warning

## Section 2. Hazards identification

**Hazard statements** : Flammable liquid and vapor.  
Causes serious eye irritation.  
Causes skin irritation.  
Suspected of causing cancer.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Toxic to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves: > 8 hours (breakthrough time): Nitrile or Neoprene gloves. 4H 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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Wash hands thoroughly after handling.

**Response** : Collect spillage. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. 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.

**Supplemental label elements** : Avoid contact with skin and clothing. Wash thoroughly after handling.

**Hazards not otherwise classified** : Prolonged or repeated contact may dry skin and cause irritation.

### Additional information

The NIOSH IDLH (Immediately Dangerous to Life and Health) value for hydrogen sulfide is 100 ppm. Hydrogen sulfide odor is not a good warning property. The human sense of smell may become "fatigued" after a few minutes of exposure to hydrogen sulfide and no longer be able to detect the odor. See Section 11 for more detailed information on health effects and symptoms.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	%	CAS number
Kerosene (petroleum)	20 - 30	8008-20-6
Light aromatic naphtha	10 - 20	64742-95-6
Acid phosphate ester	10 - 20	Trade secret.
1,2,4-Trimethylbenzene	10 - 20	95-63-6
Oxyalkylated alkyl phenol	5 - 10	Trade secret.
Amine derivatives	5 - 10	Trade secret.
Isopropanol	1 - 5	67-63-0
Phosphates	1 - 5	Trade secret.
1,3,5-Trimethylbenzene	1 - 5	108-67-8
1,2,3-Trimethylbenzene	1 - 5	526-73-8
Xylene	1 - 5	1330-20-7
Naphthalene	0.1 - 1	91-20-3
Cumene	0.1 - 1	98-82-8

## Section 3. Composition/information on ingredients

Fatty amine	0.1 - 1	Trade secret.
Hydrogen sulfide	< 0.1	7783-06-4

### Additional information

The 0.1% (1000 ppm) maximum hydrogen sulfide (H<sub>2</sub>S) content shown above is for the liquid phase. The headspace of containers of this product may contain levels of H<sub>2</sub>S higher than this.

## 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. 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. 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

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation. Defatting to the skin.
- Ingestion** : Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

- Eye contact** : pain or irritation, watering, redness
- Inhalation** : respiratory tract irritation, coughing, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness
- Skin contact** : irritation, redness, dryness, cracking
- Ingestion** : No specific data.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 4. First aid measures

### Additional information

If product is ingested and vomiting occurs naturally, have person lean forward to reduce the risk of aspiration into the lungs. If breathing has stopped or the heart has stopped, trained personnel should immediately administer artificial respiration or cardiopulmonary resuscitation, as required.

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, 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 toxic 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, nitrogen oxides, sulfur oxides, phosphorus 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.

**For emergency responders** : If specialized 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. Collect spillage.

### 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.

## Section 6. Accidental release measures

- 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.**

### Additional information

Released material may contain residual sulfides. Spray residual material left after initial clean up with weak (approximately 5 percent) hydrogen peroxide to oxidize sulfides. Recover as much solution as possible. A respirator suitable for H<sub>2</sub>S may be necessary in the event of a spill.

## 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. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. 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 explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- 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.

### Additional information

Avoid inhalation of vapors near openings on storage containers and manufacturing equipment. This product should be transferred under negative pressure.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Hydrogen sulfide	<p><b>ACGIH TLV (United States, 3/2015).</b>            STEL: 5 ppm, 0 times per shift, 15 minutes.            TWA: 1 ppm, 0 times per shift, 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>            STEL: 21 mg/m<sup>3</sup>, 0 times per shift, 15 minutes.            STEL: 15 ppm, 0 times per shift, 15 minutes.            TWA: 14 mg/m<sup>3</sup>, 0 times per shift, 8 hours.            TWA: 10 ppm, 0 times per shift, 8 hours.</p> <p><b>OSHA PEL Z2 (United States, 2/2013).</b>            AMP: 50 ppm, 0 times per shift, 10 minutes.            CEIL: 20 ppm, 0 times per shift, 0 hours.</p>
Kerosene (petroleum)	<p><b>ACGIH TLV (United States, 3/2015). Absorbed through skin.</b>            TWA: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapor), 0 times per shift, 8 hours.</p>
Light aromatic naphtha	None.
Acid phosphate ester	None.
1,2,4-Trimethylbenzene	<p><b>ACGIH TLV (United States, 3/2015).</b>            TWA: 123 mg/m<sup>3</sup>, 0 times per shift, 8 hours.            TWA: 25 ppm, 0 times per shift, 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>            TWA: 125 mg/m<sup>3</sup>, 0 times per shift, 8 hours.            TWA: 25 ppm, 0 times per shift, 8 hours.</p>
Oxyalkylated alkyl phenol	None.
Amine derivatives	None.
Isopropanol	<p><b>ACGIH TLV (United States, 4/2014).</b>            STEL: 400 ppm, 0 times per shift, 15 minutes.            TWA: 200 ppm, 0 times per shift, 8 hours.</p> <p><b>OSHA PEL (United States, 2/2013).</b>            TWA: 980 mg/m<sup>3</sup>, 0 times per shift, 8 hours.            TWA: 400 ppm, 0 times per shift, 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>            STEL: 1225 mg/m<sup>3</sup>, 0 times per shift, 15 minutes.            STEL: 500 ppm, 0 times per shift, 15 minutes.            TWA: 980 mg/m<sup>3</sup>, 0 times per shift, 8 hours.            TWA: 400 ppm, 0 times per shift, 8 hours.</p>
Phosphates	None.
1,3,5-Trimethylbenzene	<p><b>ACGIH TLV (United States, 3/2015).</b>            TWA: 123 mg/m<sup>3</sup>, 0 times per shift, 8 hours.            TWA: 25 ppm, 0 times per shift, 8 hours.</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b>            TWA: 125 mg/m<sup>3</sup>, 0 times per shift, 8 hours.            TWA: 25 ppm, 0 times per shift, 8 hours.</p>
1,2,3-Trimethylbenzene	<b>ACGIH TLV (United States, 3/2015).</b>

## Section 8. Exposure controls/personal protection

Xylene	<p>TWA: 123 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 25 ppm, 0 times per shift, 8 hours.  <b>OSHA PEL 1989 (United States, 3/1989).</b>  TWA: 125 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 25 ppm, 0 times per shift, 8 hours.</p> <p><b>ACGIH TLV (United States, 3/2015).</b>  STEL: 651 mg/m<sup>3</sup>, 0 times per shift, 15 minutes.  STEL: 150 ppm, 0 times per shift, 15 minutes.  TWA: 434 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 100 ppm, 0 times per shift, 8 hours.  <b>OSHA PEL (United States, 2/2013).</b>  TWA: 435 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 100 ppm, 0 times per shift, 8 hours.  <b>OSHA PEL 1989 (United States, 3/1989).</b>  STEL: 655 mg/m<sup>3</sup>, 0 times per shift, 15 minutes.  STEL: 150 ppm, 0 times per shift, 15 minutes.  TWA: 435 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 100 ppm, 0 times per shift, 8 hours.</p>
Naphthalene	<p><b>ACGIH TLV (United States, 3/2015). Absorbed through skin.</b>  TWA: 52 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 10 ppm, 0 times per shift, 8 hours.  <b>OSHA PEL (United States, 2/2013).</b>  TWA: 50 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 10 ppm, 0 times per shift, 8 hours.  <b>OSHA PEL 1989 (United States, 3/1989).</b>  STEL: 75 mg/m<sup>3</sup>, 0 times per shift, 15 minutes.  STEL: 15 ppm, 0 times per shift, 15 minutes.  TWA: 50 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 10 ppm, 0 times per shift, 8 hours.</p>
Cumene	<p><b>ACGIH TLV (United States, 3/2015).</b>  TWA: 50 ppm, 0 times per shift, 8 hours.  <b>OSHA PEL (United States, 2/2013). Absorbed through skin.</b>  TWA: 245 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 50 ppm, 0 times per shift, 8 hours.  <b>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.</b>  TWA: 245 mg/m<sup>3</sup>, 0 times per shift, 8 hours.  TWA: 50 ppm, 0 times per shift, 8 hours.</p>
Fatty amine	None.

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.

**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.

## Section 8. Exposure controls/personal protection

### 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: Nitrile or Neoprene gloves. 4H gloves.
- Skin protection** : Wear long sleeves to prevent repeated or prolonged skin contact.
- Respiratory protection** : Hydrogen sulfide accumulates in the headspace of containers of this product. During sealed transfer of this product under well-ventilated conditions, where inhalation exposure potential is minimal, respiratory protection is not expected to be necessary. However, if after a thorough hazard assessment respiratory protection is deemed necessary an appropriate supplied air respirator must be utilized.

### Additional information

Prior to handling containers of this product, make sure to be wearing a hydrogen sulfide (H<sub>2</sub>S) monitor that is in sound working condition.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Amber.
- Odor** : Pungent. Mercaptan. [Strong]
- Odor threshold** : Not available.
- pH** : 2 to 3 [Conc. (% w/w): 5%]  
: 5% of product in 75% isopropanol / 25% water solution
- Melting/freezing point** : Not available.
- Boiling point** : Not available.
- Initial Boiling Point** : Not available.
- Flash point** : Closed cup: 26.1°C (79°F) [SFCC]
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Highly 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** : 2.95 psig (Reid at 130 F, 54.4 C)
- Vapor density** : >1 [Air = 1]
- Relative density** : 0.8992 (15.6°C)
- Density** : 7.49 (lbs/gal)
- Solubility in water** : Dispersible
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic (15.6°C): 11 cP
- VOC** : Not available.
- Pour Point** : -34.4°C (-29.9°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 and acids. Isopropanol is incompatible with acrylaldehyde, aluminum powder, and potassium tert-butoxide.
- 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
Kerosene (petroleum)	LD50 Oral	Rat	15 g/kg	-
Light aromatic naphtha	LD50 Oral	Rat	2900 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor	Rat	18000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	5 g/kg	-
Amine derivatives	LD50 Oral	Rat	>4000 mg/kg	-
Isopropanol	LC50 Inhalation Vapor	Rat	>10000 ppm	6 hours
	LD50 Dermal	Rabbit	6.29 g/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
Phosphates	LD50 Dermal	Rabbit	>8000 mg/kg	-
	LD50 Oral	Rat	9200 mg/kg	-
1,3,5-Trimethylbenzene	LC50 Inhalation Vapor	Rat	24000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	5000 mg/kg	-
Xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Dermal	Rabbit	>1700 mg/kg	-
	LD50 Oral	Male rat	3523 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
Naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
Cumene	LC50 Inhalation Vapor	Mouse	10000 mg/m <sup>3</sup>	7 hours
	LC50 Inhalation Vapor	Rat	39000 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	10600 mg/kg	-
	LD50 Oral	Rat	2.9 g/kg	-
Fatty amine	LD50 Dermal	Rat	5600 mg/kg	-
	LD50 Oral	Rat	1330 mg/kg	-

#### Irritation/Corrosion

No applicable toxicity data

#### Sensitization

No applicable toxicity data

#### Mutagenicity

No applicable toxicity data

## Section 11. Toxicological information

### Carcinogenicity

Product/ingredient name	OSHA	IARC	NTP
Kerosene (petroleum)	-	3	-
Isopropanol	-	3	-
Xylene	-	3	-
Naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.
Cumene	-	2B	Reasonably anticipated to be a human carcinogen.

### Reproductive toxicity

No applicable toxicity data

### Teratogenicity

No applicable toxicity data

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Kerosene (petroleum)	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Light aromatic naphtha	Category 3	Not applicable.	Narcotic effects
1,2,4-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Isopropanol	Category 3	Not applicable.	Narcotic effects
1,3,5-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
1,2,3-Trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation
Xylene	Category 3	Not applicable.	Narcotic effects
Cumene	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not applicable.

### Aspiration hazard

Name	Result
Kerosene (petroleum)	ASPIRATION HAZARD - Category 1
Light aromatic naphtha	ASPIRATION HAZARD - Category 1
1,2,3-Trimethylbenzene	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1
Cumene	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** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

## Section 11. Toxicological information

<b>Carcinogenicity</b>	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	3641.8 mg/kg
Dermal	100415.7 mg/kg
Inhalation (gases)	456435.1 ppm
Inhalation (vapors)	168.5 mg/l

## 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
Isopropanol	Acute LC50 22.4 mg/l Fresh water	Fish - Tilapia zillii	96 hours
	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
Phosphates	Acute LC50 1400000 µg/l	Fish - Gambusia affinis	96 hours
	Acute EC50 0.48 mg/l	Algae - Skeletonema	72 hours
1,3,5-Trimethylbenzene	Acute LC50 3.2 mg/l	Fish	96 hours
	Acute LC50 12520 to 15050 µg/l Fresh water	Fish - Carassius auratus	96 hours
Xylene	Chronic NOEC 400 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
Naphthalene	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 1.6 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2350 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
Cumene	Acute LC50 213 µg/l Fresh water	Fish - Melanotaenia fluviatilis - Larvae	96 hours
	Chronic NOEC 0.67 ppm Fresh water	Fish - Oncorhynchus kisutch	40 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

Product/ingredient name	Test	Result	Dose	Inoculum
Phosphates	-	28 % - 28 days	-	-

## Section 12. Ecological information





Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Phosphates	-	-	Inherent

**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
<b>UN number</b>	UN1993	UN1993	UN1993	UN1993
<b>UN proper shipping name</b>	FLAMMABLE LIQUID, N.O.S. (Contains: Isopropanol, Kerosene (petroleum))	FLAMMABLE LIQUID, N.O.S. (Contains: Isopropanol, Kerosene (petroleum))	FLAMMABLE LIQUID, N.O.S. (Contains: Isopropanol, Kerosene (petroleum))	FLAMMABLE LIQUID, N.O.S. (Contains: Isopropanol, Kerosene (petroleum))
<b>Transport hazard class(es)</b>	3 	3 	3 	3 
<b>Packing group</b>	III	III	III	III
<b>Environmental hazards</b>	Yes.	Yes.	Yes.	No.
<b>Additional information</b>	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.7 (Marine pollutant mark).	<b>Emergency schedules (EmS)</b> F-E S-E	-

**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 and the IBC Code** : Not available.

## Section 14. Transport information

**DOT Reportable Quantity** Xylene, 1219 gal of this product.  
Naphthalene, 1741 gal of this product.

**Marine pollutant** Kerosene (petroleum)  
Light aromatic naphtha

**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:** Naphthalene  
**Clean Water Act (CWA) 311:** Xylene; Naphthalene; hydrogen sulphide

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

List name	Status	Ingredient name	Name on list	Conc.
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Cumene	Cumene	0.1 - 1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Xylene	Xylenes	1 - 5
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Naphthalene	Naphthalene	0.1 - 1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Methanol	Methanol	0.1 - 1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	Hydrogen sulfide	Hydrogen sulfide	0 - 0.1
United States - Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed	1,4-Dioxane	1,4-Dioxane	0 - 0.1

### SARA 302/304

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Hydrogen sulfide	< 0.1	Yes.	500	-	100	-

### SARA 311/312

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

### SARA 313

	Product name	CAS number	%
<b>Supplier notification</b>	1,2,4-Trimethylbenzene	95-63-6	10 - 20
	Isopropanol	67-63-0	1 - 5
	Xylene	1330-20-7	1 - 5
	Naphthalene	91-20-3	0.1 - 1

### Canada

**Canada (CEPA DSL):** : All components are listed or exempted.

## Section 16. Other information

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



### History

**Date of printing** : 12/13/2016

### Notice to reader

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