

SAFETY DATA SHEET

OPS 2501SPH

Section 1. Identification

GHS product identifier

: **OPS 2501SPH**

Other means of identification

: Special Paraffin Solvent Proprietary Mixture

Product use

: Not available.

Product type

: Liquid.

Manufacturer

: Jacam Manufacturing 2013, L.L.C.

P.O.Box 208, 1656 Ave. Q. Sterling, Kansas 67579

Validation date

: 10/4/2016.

For Chemical Emergency
Spill, Leak Fire, Exposure or
Accident:

: Call CHEMTREC Day or Night

Within USA and Canada 800-424-9300 CCN# 11754

Or +1 703-527-3887 (Collect calls accepted)

Direct all other calls to:

Jacam Chemicals 2013, L.L.C. 620-278-3355

Mon - Fri 8 a.m. to 5 p.m. (Closed on major holidays)

Supplier's details

: Jacam Chemicals 2013, L.L.C. P.O. Box 96, 205 S. Broadway

Sterling, Kansas 67579

Section 2. Hazards identification

10/4/2016.

Classification of the substance or mixture

: AMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (oral) - Category 3

ACUTE TOXICITY (inhalation) - Category 3 SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

CARCINOGENICITY - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 12.7%

Section 2. Hazards identification

GHS label elements

Hazard pictograms







Signal word

Hazard statements

: Danger

: M225 - Highly flammable liquid and vapor.

H301 + H331 - Toxic if swallowed or if inhaled.

H319 - Causes serious eye irritation.

H315 - Causes skin irritation.

H351 - Suspected of causing cancer.

Precautionary statements

General

: P103 - Read label before use.

P102 - Keep out of reach of children.

P101 - If medical advice is needed, have product container or label at hand.

Prevention

: 201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P281 - Use personal protective equipment as required.

P280 - Wear protective gloves: > 8 hours (breakthrough time): nitrile rubber. Wear eye

or face protection: Recommended: chemical splash goggles.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling

equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P233 - Keep container tightly closed.

P271 - Use only outdoors or in a well-ventilated area.

P261 - Avoid breathing vapor.

P270 - Do not eat, drink or smoke when using this product.

P264 - Wash hands thoroughly after handling.

Response

P308 + P313 - IF exposed or concerned: Obtain medical attention.

P304 + P340 + P311 - IF INHALED: Remove victim to fresh air and keep at rest in a

position comfortable for breathing. Call a POISON CENTER or physician.

P301 + P310 + P330 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P302 + P352 + P362-2 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing.

P332 + P313 - If skin irritation occurs: Obtain medical attention.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Obtain medical attention.

Storage

: . - Store in accordance with all local, regional, national and international regulations. P403 - Store in a well-ventilated place.

P235 - Keep cool.

Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

: None known.

Date of issue/Date of revision

10/4/2016.

People + Products ← Performance

Version

: 1.02

Section 2. Hazards identification

Routes of entry

: Dermal contact. Eye contact. Inhalation.

INGESTION: Although not a normal route of entry, ingestion is expected to be harmful.

DO NOT TAKE INTERNALLY. FOR INDUSTRIAL USE ONLY.

Target organs

: Contains material which causes damage to the following organs: upper respiratory tract,

central nervous system (CNS).

Contains material which may cause damage to the following organs: kidneys, the reproductive system, liver, gastrointestinal tract, skin, eye, lens or cornea.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Chemical name

: Not available.

Other means of identification

: Special Paraffin Solvent

Proprietary Mixture

CAS number/other identifiers

CAS number

: Not applicable.

Ingredient name	%	CAS number
Methanol	30 - 60	67-56-1
Toluene	10 - 30	108-88-3
Ethylbenzene	0 - 1	100-41-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 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. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. If irritation persists, obtain medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If irritation persists, obtain medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. If irritation persists, obtain medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

Ingestion

: If irritation persists, obtain medical attention. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. 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. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eve irritation.

: Foxic if inhaled. Inhalation

Skin contact : Causes skin irritation.

: Toxic if swallowed. Irritating to mouth, throat and stomach. Ingestion

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

> pain or irritation watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

> irritation redness

: No specific data. Ingestion

Specific target organ toxicity (single exposure)

Name Route of **Target organs** Category

exposure

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name Result

Ethylbenzene ASPIRATION HAZARD - Category 1

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.

: No specific treatment. **Specific treatments**

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.

Section 4. First aid measures

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

: Highly 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.

Additional Vapor Statement

: Not available. Not available.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon dioxide carbon monoxide

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.

Remark Remark : Not available. : Not available.

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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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).

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

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. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, 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.

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 breathe vapor or mist. Do not ingest. 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.

including any incompatibilities

Conditions for safe storage, : 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 in accordance with all local, regional, national and international regulations. 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

10/4/2016.

Control parameters

Occupational exposure limits

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Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Methanol	ACGIH TLV (United States, 4/2014).
manner of the commence of the	Absorbed through skin.
	TWA: 200 ppm 8 hours.
	TWA: 262 mg/m ³ 8 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 328 mg/m³ 15 minutes.
,	OSHA PEL 1989 (United States, 3/1989).
	Absorbed through skin.
	TWA: 200 ppm 8 hours.
	TWA: 260 mg/m³ 8 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 325 mg/m³ 15 minutes.
	NIOSH REL (United States, 10/2013).
	Absorbed through skin.
	TWA: 200 ppm 10 hours.
	TWA: 260 mg/m³ 10 hours.
	STEL: 250 ppm 15 minutes.
	STEL: 325 mg/m³ 15 minutes.
	OSHA PEL (United States, 2/2013).
	TWA: 200 ppm 8 hours.
	TWA: 260 mg/m ³ 8 hours.
Toluene	OSHA PEL 1989 (United States, 3/1989).
	TWA: 100 ppm 8 hours.
	TWA: 375 mg/m ³ 8 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 560 mg/m³ 15 minutes.
	OSHA PEL Z2 (United States, 2/2013).
	TWA: 200 ppm 8 hours.
	CEIL: 300 ppm
	AMP: 500 ppm 10 minutes.
	NIOSH REL (United States, 10/2013).
	TWA: 100 ppm 10 hours.
	TWA: 375 mg/m³ 10 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 560 mg/m³ 15 minutes.
	ACGIH TLV (United States, 4/2014).
	TWA: 20 ppm 8 hours.
Ethylbenzene	ACGIH TLV (United States, 4/2014).
	TWA: 20 ppm 8 hours.
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 100 ppm 8 hours.
	TWA: 435 mg/m ³ 8 hours.
	STEL: 125 ppm 15 minutes.
	STEL: 545 mg/m³ 15 minutes.
	NIOSH REL (United States, 10/2013).
	TWA: 100 ppm 10 hours.
	TWA: 435 mg/m³ 10 hours.
	STEL: 125 ppm 15 minutes.
	STEL: 545 mg/m³ 15 minutes.
	OSHA PEL (United States, 2/2013).
	TWA: 100 ppm 8 hours.
	TWA: 435 mg/m ³ 8 hours.

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.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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

Eafety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles Recommended: chemical splash goggles

Skin protection Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): nitrile rubber

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Recommended: overall safety apron

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: nitrile rubber

Respiratory protection

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

Personal protective equipment (Pictograms)



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Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. [Clear.] Color Colorless. : Aromatic. Odor Not available. **Odor threshold**

pH 7 to 8

: Not available. **Melting point** : 138.5°C (281.3°F) **Boiling point**

Flash point : Closed cup: 21.111°C (70°F) [Pensky-Martens.]

: Not applicable. **Burning time Burning rate** : Not applicable. : Not available. **Evaporation rate** Flammability (solid, gas) : Not available. Lower and upper explosive : Not available.

(flammable) limits

: Not available. Vapor pressure Vapor density : >1 [Air = 1] : 0.78 to 0.82 Relative density

: **8.**5 to 6.84 (lbs/gal) Density

: Very slightly soluble in the following materials: cold water. Solubility

Partition coefficient: n-octanol/

water

: Not available.

: Not available. **Auto-ignition temperature** : Not available. **Decomposition temperature**

: Not available. SADT : Not available. **Viscosity** : Not applicable. Type of aerosol Heat of combustion : Not available. : Not applicable. **Ignition distance** : Not applicable. **Enclosed space ignition -**

Time equivalent

Enclosed space ignition -

Deflagration density

: Not applicable.

Flame height : Not applicable. Flame duration : Not applicable.

Section 10. Stability and reactivity

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

Chemical stability : The product is stable.

Possibility of hazardous

reactions

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

: 1.02

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Section 10. Stability and reactivity

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** Methanol LC50 Inhalation Gas. Rat 145000 ppm 1 hours LC50 Inhalation Gas. Rat 64000 ppm 4 hours LD50 Dermal Rabbit 15800 mg/kg LD50 Oral Rat 5600 mg/kg Toluene LC50 Inhalation Vapor Rat 49 g/m³ 4 hours Rat 636 mg/kg LD50 Oral >5000 mg/kg Ethylbenzene LD50 Dermal Rabbit LD50 Oral 3500 mg/kg Rat

Conclusion/Summary: Not available.

Irritation/Corrosion					
Product/ingredient name	Result	Species	Score	Exposure	Observation
M ethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	- .
	Skin - Mild irritant	Pig	-	24 hours 250 microliters	- '
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams	-

Skin : Not available.

Eyes : Not available.

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Section 11. Toxicological information

Respiratory : Not available.

Sensitization

Product/ingredient name Route of Species Result

exposure

Not available.

Skin

: Not available.

Respiratory

: Not available.

Mutagenicity

Product/ingredient name

Test

Experiment

Result

Not available.

Conclusion/Summary

: Not available.

Carcinogenicity

Product/ingredient name

Result

Species

Dose

Exposure

Not available.

Conclusion/Summary

: Not available.

Classification

Product/ingredient name OSHA IARC NTP

Toluene - 3 -Ethylbenzene - 2B -

Reproductive toxicity

Product/ingredient name Maternal Fertility Development Species Dose Exposure

toxicity toxin

Not available.

Conclusion/Summary: Not available.

Teratogenicity

Product/ingredient name Result Species Dose Exposure

Not available.

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name Category Route of Target organs

exposure

Not available.

Specific target organ toxicity (repeated exposure)

10/4/2016.

Not available.

Aspiration hazard

Name Result

Ethylbenzene ASPIRATION HAZARD - Category 1

Information on the likely ToxKinetics - routes of exposure

: Routes of entry anticipated: Dermal, Inhalation.

Section 11. Toxicological information

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Foxic if inhaled.

Skin contact: Causes skin irritation.

Ingestion: Toxic if swallowed. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

Potential chronic health effects

Not available.

Conclusion/Summary: Not available.

General : No known significant effects or critical hazards.

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

exposure.

Mutagenicity
 Teratogenicity
 No known significant effects or critical hazards.
 Developmental effects
 No known significant effects or critical hazards.
 Fertility effects
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

		\neg
Route	ATE value	_
⊘ ral	136.8 mg/kg	
Inhalation (vapors)	4.367 mg/l	- 1

Interactive effects : Not available.

Section 11. Toxicological information

Other information

: Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Methanol	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 2500000 μg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 3289 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 100 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
Toluene	Acute EC50 433 ppm Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 12500 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 μg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 μg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 μg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 500000 µg/l Fresh water		96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Ethylbenzene	Acute EC50 4600 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 2930 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
31-1X	Acute LC50 5200 µg/l Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute LC50 4200 μg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 1000 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours

Conclusion/Summary

: Not available.

Persistence and degradability

Not available.

Product/ingredient name

Not available.

Conclusion/Summary Product/ingredient name : Not available.

10/4/2016.

Not available.

PG*: Packing group

Section 12. Ecological information

Bioaccumulative potential			
Product/ingredient name	LogPow	BCF	Potential
Methanol	-0.77	<10	low
Toluene	2.73	90	low
Ethylbenzene	3.6	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Mobility

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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. Empty containers or liners may retain some product residues. 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.

Waste stream

: Not available.

RCRA classification

: Not available.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS#		Reference number
Methanol (I); Methyl alcohol (I) Toluene; Benzene, methyl-	67-56-1	Listed	U154
	108-88-3	Listed	U220

Section 14. Transport information

Regulatory information	UN/NA Number	Proper shipping name	Hazard Class(es)	PG*	
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DOT Classification

N1993	LAMMABLE LIQUID, N.O.S. (Methanol, Toluene) RQ (Toluene,	3	II
	Methanol)		

Additional information

Section 14. Transport information

Emergency Response Guide (ERG):128

Reportable quantity

4081.3 lbs / 1852.9 kg [611.86 gal / 2316.1 L]

Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.





TDG '

Classification

N1993 LAMMABLE LIQUID, N.O.S. (Methanol, Toluene)

3

II

Additional information

Label >



IMDG Class

N1993 LAMMABLE LIQUID, N.O.S. (Methanol, Toluene)

3

II

Marine pollutant notes:

: Not available.

Additional information

Label



IATA-DGR Class

N1993 LAMMABLE LIQUID, N.O.S. (Methanol, Toluene)

3

II

Additional information

Date of issue/Date of revision

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Section 14. Transport information

Label



Section 15. Regulatory information

U.S. Federal regulations

: FSCA 8(a) PAIR: Oxyalkylated Resins

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

All components are listed or exempted.

Clean Water Act (CWA) 307: Toluene; Ethylbenzene

Ziean Water Act (CWA) 311: Toluene; Xylene; Ethylbenzene

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)** : Listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

: Not listed

DEA List I Chemicals

(Precursor Chemicals)

DEA List II Chemicals (Essential Chemicals) : Listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification

: Fire hazard

Immediate (acute) health hazard Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
M ethanol	30 - 60	Yes.	No.	No.	Yes.	Yes.
Toluene	10 - 30	Yes.	No.	No.	Yes.	No.
Ethylbenzene	0 - 1	Yes.	No.	No.	Yes.	Yes.

SARA 313

Section 15. Regulatory information

	Product name	CAS number	%
Form R - Reporting requirements	Methanol	67-56-1	30 - 60
	Toluene	108-88-3	10 - 30
	Ethylbenzene	100-41-4	0 - 1
Supplier notification	Methanol	67-56-1	30 - 60
	Toluene	108-88-3	10 - 30
	Ethylbenzene	100-41-4	0 - 1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: METHANOL; TOLUENE

New York : The following components are listed: Methanol; Toluene; Ethylbenzene

New Jersey : The following components are listed: METHYL ALCOHOL; METHANOL; TOLUENE;

BENZENE, METHYL-; ETHYL BENZENE; BENZENE, ETHYL-

Pennsylvania: The following components are listed: METHANOL; BENZENE, METHYL-; BENZENE,

ETHYL-

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Methanol	No.	Yes.	No.	23000 µg/day (ingestion) 47000 µg/day (inhalation)
Toluene	No.	Yes.	No.	7000 μg/day (ingestion)
Ethylbenzene	Yes.	No.	41 μg/day (ingestion) 54 μg/day (inhalation)	, •
cumene	Yes.	No.	No.	No.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Canada

WHMIS (Canada)

: Class B-2: Flammable liquid

Class D-1B: Material causing immediate and serious toxic effects (Toxic).

Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Section 15. Regulatory information

Canadian lists

Canadian NPRI

: The following components are listed: Methanol; Toluene

(Pollution Release)

CEPA Toxic substances

. None of the components are listed.

Canada inventory-DSL / NDSL

- All components are listed or exempted.

International lists
National inventory

Australia : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.
Europe : All components are listed or exempted.

Japan : Not determined.

Malaysia : All components are listed or exempted.New Zealand : All components are listed or exempted.

Philippines : Not determined.

Republic of Korea : All components are listed or exempted. Taiwan : All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Normal Package Size(s): Ball: 2" Ball 50/Cooler; 4" Ball 12/Cooler

Dry Product: 50 Lbs/Box Liquid: 5 Gallon/55 Gallon/Bulk Pellets: 30 Lbs/Cooler; 24 Lbs/Pail Stix: 1 1/4": 50 Each/Cooler

History

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Prepared by : Jacam Regulatory Department

(M)SDS Requests: SDS@jacam.com

Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References

Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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*** END OF SDS ***