

1. Identification

Product identifier	Liquid Wrench Lubricating Oil	
Other means of identification		
SDS number	L249	
Part No.	L249	
Tariff code	3403.19.1000	
Recommended use	Lubricant	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	RSC Chemical Solutions	
Address	600 Radiator Road Indian Trail, NC 28079 United States	
Telephone	Customer Service:	(704) 821-7643
	Technical:	(704) 684-1811
Website	www.rscbrands.com	
E-mail	sds@rscbrands.com	
Emergency phone number	Emergency Telephone:	(303) 623-5716
	Emergency Contact:	RMPDC (877-740-5015)

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1B
	Reproductive toxicity (fertility, the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	

Label elements



Signal word Danger

Hazard statement Flammable liquid and vapor. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging the unborn child. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed: Immediately call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

Combustible.

Supplemental information

76.44% of the mixture consists of component(s) of unknown acute oral toxicity.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum), Hydrotreated Heavy Naphthenic		64742-52-5	40 - < 50
2-(2-butoxyéthoxy) Éthanol		112-34-5	10 - < 20
Low Odor Base Solvent		64742-47-8	10 - < 20
Naphtha (petroleum), Hydrotreated Heavy		64742-48-9	5 - < 10
Solvent Naphtha (petroleum), Medium Aliph.		64742-88-7	5 - < 10
Stoddard Solvent		8052-41-3	5 - < 10
NAPHTHALENE		91-20-3	< 1
Nonane		111-84-2	< 1
BENZENE, METHYL-		108-88-3	< 0.3
BENZENE,1-METHYLETHYL-		98-82-8	< 0.3
ETHYLBENZENE		100-41-4	< 0.3
HEXANE		110-54-3	< 0.3
Other components below reportable levels			5 - < 10

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.
5. Fire-fighting measures	
Suitable extinguishing media	Alcohol resistant foam. Water fog. Dry chemical powder. Dry chemicals. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Combustible. Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Keep away from heat and sources of ignition. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep out of the reach of children. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
BENZENE, 1-METHYLETHY L- (CAS 98-82-8)	PEL	245 mg/m3	
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	PEL	50 ppm 5 mg/m3	Mist.
ETHYLBENZENE (CAS 100-41-4)	PEL	2000 mg/m3 500 ppm 435 mg/m3	
HEXANE (CAS 110-54-3)	PEL	100 ppm 1800 mg/m3	
Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)	PEL	500 ppm 400 mg/m3	
NAPHTHALENE (CAS 91-20-3)	PEL	100 ppm 50 mg/m3	
Stoddard Solvent (CAS 8052-41-3)	PEL	10 ppm 2900 mg/m3	
		500 ppm	

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
BENZENE, METHYL- (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)	TWA	10 ppm	Inhalable fraction and vapor.
BENZENE, METHYL- (CAS 108-88-3)	TWA	20 ppm	
BENZENE, 1-METHYLETHY L- (CAS 98-82-8)	TWA	50 ppm	
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	TWA	5 mg/m3	Inhalable fraction.
ETHYLBENZENE (CAS 100-41-4)	TWA	20 ppm	
HEXANE (CAS 110-54-3)	TWA	50 ppm	
NAPHTHALENE (CAS 91-20-3)	TWA	10 ppm	
Nonane (CAS 111-84-2)	TWA	200 ppm	
Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)	TWA	200 mg/m3	Non-aerosol.
Stoddard Solvent (CAS 8052-41-3)	TWA	100 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
BENZENE, METHYL- (CAS 108-88-3)	STEL	560 mg/m3 150 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
	TWA	375 mg/m3 100 ppm	
BENZENE,1-METHYLETHYL- (CAS 98-82-8)	TWA	245 mg/m3 50 ppm	
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	Ceiling	1800 mg/m3	
ETHYLBENZENE (CAS 100-41-4)	STEL	10 mg/m3	Mist.
	STEL	545 mg/m3	
		125 ppm	
	TWA	435 mg/m3 100 ppm	
HEXANE (CAS 110-54-3)	TWA	180 mg/m3 50 ppm	
Low Odor Base Solvent (CAS 64742-47-8)	TWA	100 mg/m3	
Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)	TWA	400 mg/m3	
NAPHTHALENE (CAS 91-20-3)	STEL	100 ppm 75 mg/m3	
		15 ppm	
	TWA	50 mg/m3 10 ppm	
Nonane (CAS 111-84-2)	TWA	1050 mg/m3 200 ppm	
Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)	TWA	100 mg/m3	
Stoddard Solvent (CAS 8052-41-3)	Ceiling	1800 mg/m3	
	TWA	350 mg/m3	

Biological limit values
ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
BENZENE, METHYL- (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
ETHYLBENZENE (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
HEXANE (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedione, without hydrolysis	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines
US - California OELs: Skin designation

BENZENE, METHYL- (CAS 108-88-3)	Can be absorbed through the skin.
BENZENE,1-METHYLETHYL- (CAS 98-82-8)	Can be absorbed through the skin.
HEXANE (CAS 110-54-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

BENZENE, METHYL- (CAS 108-88-3)	Skin designation applies.
BENZENE,1-METHYLETHYL- (CAS 98-82-8)	Skin designation applies.

US - Tennessee OELs: Skin designation

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

HEXANE (CAS 110-54-3) Can be absorbed through the skin.

NAPHTHALENE (CAS 91-20-3) Can be absorbed through the skin.

Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Can be absorbed through the skin.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Liquid. Opaque
Physical state	Liquid.
Form	Liquid.
Color	Yellow.
Odor	Sweet Vanilla
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-94 °F (-70 °C) estimated
Initial boiling point and boiling range	314.6 °F (157 °C) estimated
Flash point	136.0 °F (57.8 °C) Tag Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.7 % estimated
Flammability limit - upper (%)	6 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.31 hPa estimated
Vapor density	Not available.
Relative density	1.46
Solubility(ies)	
Solubility (water)	Not available.

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	229 °F (109.44 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	7.26 lbs/gal
Explosive properties	Not explosive.
Flammability class	Combustible II estimated
Moisture	< 0.1 %
Oxidizing properties	Not oxidizing.
Percent volatile	16.22 % estimated
Specific gravity	0.87
VOC (Weight %)	24 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Headache. May cause drowsiness and dizziness. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. Narcotic effects.

Components	Species	Test Results
2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)		
Acute		
Dermal		
LD50	Rabbit	2700 mg/kg
Inhalation		
<i>Liquid</i>		
LC50	Rat	> 29 ppm
Oral		
LD50	Guinea pig	2000 mg/kg
	Mouse	2400 mg/kg
	Rabbit	2200 mg/kg
	Rat	4500 mg/kg

Components	Species	Test Results
BENZENE, METHYL- (CAS 108-88-3)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	12124 mg/kg 14.1 ml/kg
Inhalation		
LC50	Mouse	5320 ppm, 8 Hours 400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours 12200 ppm, 2 Hours 8000 ppm, 4 Hours
Oral		
LD50	Rat	2.6 g/kg
BENZENE,1-METHYLETHYL- (CAS 98-82-8)		
<u>Acute</u>		
Inhalation		
LC50	Mouse	2000 ppm, 7 Hours 24.7 mg/l, 2 Hours
	Rat	8000 ppm, 4 Hours
Oral		
LD50	Rat	1400 mg/kg
ETHYLBENZENE (CAS 100-41-4)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	17800 mg/kg
Oral		
LD50	Rat	3500 mg/kg
HEXANE (CAS 110-54-3)		
<u>Acute</u>		
Inhalation		
LC50	Mouse	48000 ppm, 4 Hours
Oral		
LD50	Rat	24 mg/kg
	Wistar rat	49 mg/kg
Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)		
<u>Acute</u>		
Inhalation		
LC50	Rat	61 mg/l, 4 Hours
Oral		
LD50	Rat	> 25 ml/kg
NAPHTHALENE (CAS 91-20-3)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2 g/kg
	Rat	> 20 g/kg
Oral		
LD50	Guinea pig	1200 mg/kg
	Rat	490 mg/kg

Components	Species	Test Results
Nonane (CAS 111-84-2)		
<u>Acute</u>		
Inhalation		
LC50	Rat	3200 ppm, 4 Hours
* Estimates for product may be based on additional component data not shown.		
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	May cause genetic defects.	
Carcinogenicity	May cause cancer.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
BENZENE, METHYL- (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.	
BENZENE,1-METHYLETHYL- (CAS 98-82-8)	2B Possibly carcinogenic to humans.	
ETHYLBENZENE (CAS 100-41-4)	2B Possibly carcinogenic to humans.	
NAPHTHALENE (CAS 91-20-3)	2B Possibly carcinogenic to humans.	
Stoddard Solvent (CAS 8052-41-3)	3 Not classifiable as to carcinogenicity to humans.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
US. National Toxicology Program (NTP) Report on Carcinogens		
NAPHTHALENE (CAS 91-20-3)	Reasonably Anticipated to be a Human Carcinogen.	
Reproductive toxicity	Suspected of damaging fertility. Suspected of damaging the unborn child.	
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.	
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.	
Aspiration hazard	May be fatal if swallowed and enters airways.	
Chronic effects	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components	Species	Test Results
2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)		
Aquatic		
Fish	LC50	Bluegill (Lepomis macrochirus) 1300 mg/l, 96 hours
BENZENE, METHYL- (CAS 108-88-3)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch) 8.11 mg/l, 96 hours
BENZENE,1-METHYLETHYL- (CAS 98-82-8)		
Aquatic		
Crustacea	EC50	Brine shrimp (Artemia sp.) 3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2.7 mg/l, 96 hours
ETHYLBENZENE (CAS 100-41-4)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 7.5 - 11 mg/l, 96 hours

Components	Species	Test Results
HEXANE (CAS 110-54-3)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 2.101 - 2.981 mg/l, 96 hours
Low Odor Base Solvent (CAS 64742-47-8)		
Aquatic		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2.9 mg/l, 96 hours
Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia pulex) 2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 8.8 mg/l, 96 hours
		8.8 mg/l, 96 hours
NAPHTHALENE (CAS 91-20-3)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha) 1.11 - 1.68 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-(2-butoxyéthoxy) Éthanol	0.56
BENZENE, METHYL-	2.73
BENZENE,1-METHYLETHYL-	3.66
ETHYLBENZENE	3.15
HEXANE	3.9
NAPHTHALENE	3.3
Nonane	5.46
Stoddard Solvent	3.16 - 7.15

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1993
UN proper shipping name	Flammable liquids, n.o.s. (ALIPHATIC HYDROCARBON SOLVENT)
Transport hazard class(es)	
Class	3
Subsidiary risk	-

Label(s)	3
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	B1, B52, IB3, T4, TP1, TP29
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242

IATA

UN number	UN1993
UN proper shipping name	Flammable liquid, n.o.s. (Aliphatic Hydrocarbon Solvent)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	Yes
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (ALIPHATIC HYDROCARBON SOLVENT)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

DOT



IATA; IMDG





15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Nonane (CAS 111-84-2)

1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)	Listed.
BENZENE, METHYL- (CAS 108-88-3)	Listed.
BENZENE,1-METHYLETHYL- (CAS 98-82-8)	Listed.
ETHYLBENZENE (CAS 100-41-4)	Listed.
HEXANE (CAS 110-54-3)	Listed.
NAPHTHALENE (CAS 91-20-3)	Listed.
Nonane (CAS 111-84-2)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
2-(2-butoxyéthoxy) Éthanol	112-34-5	10 - < 20
NAPHTHALENE	91-20-3	< 1
ETHYLBENZENE	100-41-4	< 0.3

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)
BENZENE, METHYL- (CAS 108-88-3)
BENZENE,1-METHYLETHYL- (CAS 98-82-8)
ETHYLBENZENE (CAS 100-41-4)
HEXANE (CAS 110-54-3)
NAPHTHALENE (CAS 91-20-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

BENZENE, METHYL- (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

BENZENE, METHYL- (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

BENZENE, METHYL- (CAS 108-88-3) 594

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)
BENZENE, METHYL- (CAS 108-88-3)
BENZENE,1-METHYLETHYL- (CAS 98-82-8)
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)
ETHYLBENZENE (CAS 100-41-4)
HEXANE (CAS 110-54-3)
Low Odor Base Solvent (CAS 64742-47-8)
Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)
NAPHTHALENE (CAS 91-20-3)
Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)
Stoddard Solvent (CAS 8052-41-3)

US. Massachusetts RTK - Substance List

BENZENE, METHYL- (CAS 108-88-3)
BENZENE,1-METHYLETHYL- (CAS 98-82-8)
Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)
ETHYLBENZENE (CAS 100-41-4)
HEXANE (CAS 110-54-3)
Low Odor Base Solvent (CAS 64742-47-8)
Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)
NAPHTHALENE (CAS 91-20-3)
Nonane (CAS 111-84-2)
Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)
Stoddard Solvent (CAS 8052-41-3)

US. New Jersey Worker and Community Right-to-Know Act

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)
BENZENE, METHYL- (CAS 108-88-3)
BENZENE,1-METHYLETHYL- (CAS 98-82-8)
ETHYLBENZENE (CAS 100-41-4)
HEXANE (CAS 110-54-3)
Low Odor Base Solvent (CAS 64742-47-8)
Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)
NAPHTHALENE (CAS 91-20-3)
Nonane (CAS 111-84-2)
Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)
Stoddard Solvent (CAS 8052-41-3)

US. Pennsylvania Worker and Community Right-to-Know Law

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)
BENZENE, METHYL- (CAS 108-88-3)
BENZENE,1-METHYLETHYL- (CAS 98-82-8)
ETHYLBENZENE (CAS 100-41-4)
HEXANE (CAS 110-54-3)
Low Odor Base Solvent (CAS 64742-47-8)
Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)
NAPHTHALENE (CAS 91-20-3)
Nonane (CAS 111-84-2)
Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)
Stoddard Solvent (CAS 8052-41-3)

US. Rhode Island RTK

2-(2-butoxyéthoxy) Éthanol (CAS 112-34-5)
BENZENE, METHYL- (CAS 108-88-3)
BENZENE,1-METHYLETHYL- (CAS 98-82-8)
ETHYLBENZENE (CAS 100-41-4)
HEXANE (CAS 110-54-3)
NAPHTHALENE (CAS 91-20-3)

US. California Proposition 65

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

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

BENZENE (CAS 71-43-2)	Listed: February 27, 1987
BENZENE,1-METHYLETHYL- (CAS 98-82-8)	Listed: April 6, 2010
ETHYLBENZENE (CAS 100-41-4)	Listed: June 11, 2004
NAPHTHALENE (CAS 91-20-3)	Listed: April 19, 2002

US - California Proposition 65 - CRT: Listed date/Developmental toxin

BENZENE (CAS 71-43-2)	Listed: December 26, 1997
BENZENE, METHYL- (CAS 108-88-3)	Listed: January 1, 1991

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

BENZENE, METHYL- (CAS 108-88-3)	Listed: August 7, 2009
---------------------------------	------------------------

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

BENZENE (CAS 71-43-2)	Listed: December 26, 1997
-----------------------	---------------------------

International Inventories

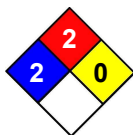
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	04-29-2015
Revision date	07-29-2015
Version #	02
HMIS® ratings	Health: 2 Flammability: 2 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 2 Instability: 0

NFPA ratings**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information

Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Transport Information: Material Transportation Information
Regulatory Information: United States
Regulatory information: California Prop 65
Regulatory information: US federal regulations
GHS: Classification