FRSC Chemical Solutions

SAFETY DATA SHEET

1. Identification

Product identifier <u>Liquid Wrench White Lithium Grease</u>

Other means of identification

SDS number L616

 Part No.
 L616, L616/4

 Tariff code
 2710.19.4000

Recommended use Grease

Recommended restrictions None known.

2. Hazard(s) identification

Physical hazards Category 2
Health hazards Category 2

Serious eye damage/eye irritation Category 2
Germ cell mutagenicity Category 1B
Carcinogenicity Category 1B

Reproductive toxicity (fertility, the unborn Category 2

child)

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated Category 1

exposure

Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment, Category 2

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word

Environmental hazards

Hazard statement

Flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Suspected of damaging the unborn child. Suspected of damaging fertility. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Material name: Liquid Wrench White Lithium Grease
L616, L616/4 Version #: 04 Revision date: 04-20-2016 Issue date: 04-29-2015

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. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe gas. 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 on skin: Wash with plenty of water. 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. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical

advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

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

sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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

Hazard(s) not otherwise classified (HNOC)

Storage

Combustible.

Supplemental information

30.59% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 30.59% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-(2-butoxyéthoxy) Éthanol		112-34-5	20 - < 30
Low Odor Base Solvent		64742-47-8	20 - < 30
Distillates (petroleum), Hydrotreated Heavy Naphthenic		64742-52-5	5 - < 10
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
Carbon Dioxide		124-38-9	1 - < 3
BENZENE, METHYL-		108-88-3	< 1
BENZENE,1-METHYLETHYL-		98-82-8	< 1
ETHYLBENZENE		100-41-4	< 1
HEXANE		110-54-3	< 1
NAPHTHALENE		91-20-3	< 1
Nonane		111-84-2	< 1
Zinc Oxide		1314-13-2	< 0.3
Other components below reportable lev	rels		5 - < 10

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

4. First-aid measures

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON Inhalation

CENTER or doctor/physician if you feel unwell.

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Rinse with water. Get medical attention if irritation develops and persists. Eye contact

Ingestion Rinse mouth. Get medical attention if symptoms occur.

symptoms/effects, acute and

Most important

delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Diarrhea. 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. Keep victim under observation.

Symptoms may be delayed.

General information

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.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing Powder. Alcohol resistant foam. Dry chemicals. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire fighting equipment/instructions

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. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods

media

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

General fire hazards

Flammable aerosol. Combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe gas. 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

Refer to attached safety data sheets and/or instructions for use. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Isolate area until gas has dispersed. The product is immiscible with water and will spread on the water surface. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental precautions

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. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. 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

Level 2 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Keep out of the reach of children. 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 Contai	minants (29 CFR 1910.1000)		
Components	Туре	Value	Form
BENZENE,1-METHYLETHY L- (CAS 98-82-8)	PEL	245 mg/m3	
Carbon Dioxide (CAS	PEL	50 ppm 9000 mg/m3	
124-38-9) Distillates (petroleum),	PEL	5000 ppm 5 mg/m3	Mist.
Hydrotreated Heavy Naphthenic (CAS 64742-52-5)		-	Wild.
		2000 mg/m3	
ETHYLBENZENE (CAS 100-41-4)	PEL	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	PEL	10 ppm 2900 mg/m3	
8052-41-3)		500 ppm	
Zinc Oxide (CAS 1314-13-2)	PEL	5 mg/m3	Respirable fraction.
		5 mg/m3 15 mg/m3	Fume. Total dust.
US. OSHA Table Z-2 (29 CFR 1910.1000)		-	
Components	Туре	Value	
BENZENE, METHYL- (CAS 108-88-3)	Ceiling	300 ppm	
	TWA	200 ppm	
US. ACGIH Threshold Limit Values Components	Туре	Value	Form
2-(2-butoxyéthoxy) Éthanol	TWA	10 ppm	Inhalable fraction and
(CAS 112-34-5) BENZENE, METHYL- (CAS 108-88-3)	TWA	20 ppm	vapor.
BENZENE,1-METHYLETHY L- (CAS 98-82-8)	TWA	50 ppm	
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm	
	TWA	5000 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	

JS. ACGIH Threshold Limit Values Components	Туре	Value	Form
Solvent Naphtha petroleum), Medium Aliph. CAS 64742-88-7)	TWA	200 mg/m3	Non-aerosol.
Stoddard Solvent (CAS 052-41-3)	TWA	100 ppm	
inc Oxide (CAS 314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.
S. NIOSH: Pocket Guide to Chem omponents	ical Hazards Type	Value	Form
ENZENE, METHYL- (CAS 08-88-3)	STEL	560 mg/m3	
30 00 0,	TWA	150 ppm 375 mg/m3 100 ppm	
ENZENE,1-METHYLETHY - (CAS 98-82-8)	TWA	245 mg/m3	
arbon Dioxide (CAS 24-38-9)	STEL	50 ppm 54000 mg/m3	
	TWA	30000 ppm 9000 mg/m3 5000 ppm	
istillates (petroleum), ydrotreated Heavy aphthenic (CAS 4742-52-5)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
THYLBENZENE (CAS 00-41-4)	STEL	545 mg/m3	
	TWA	125 ppm 435 mg/m3	
EXANE (CAS 110-54-3)	TWA	100 ppm 180 mg/m3	
ow Odor Base Solvent	TWA	50 ppm 100 mg/m3	
CAS 64742-47-8) aphtha (petroleum), ydrotreated Heavy (CAS	TWA	400 mg/m3	
4742-48-9)		100 ppm	
APHTHALENE (CAS 1-20-3)	STEL	75 mg/m3	
	TWA	15 ppm 50 mg/m3 10 ppm	
onane (CAS 111-84-2)	TWA	10 ppm 1050 mg/m3 200 ppm	
olvent Naphtha betroleum), Medium Aliph.	TWA	100 mg/m3	
CAS 64742-88-7) toddard Solvent (CAS 052-41-3)	Ceiling	1800 mg/m3	
,	TWA	350 mg/m3	
nc Oxide (CAS 314-13-2)	Ceiling	15 mg/m3	Dust.
	STEL TWA	10 mg/m3 5 mg/m3 5 mg/m3	Fume. Fume. Dust.

Biological limit values

ACGIH Biological Expos Components	Value	Determinant	Specimen	Sampling Time	
BENZENE, METHYL- (CA 108-88-3)	AS 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-Hexanedio n, without hydrolysis	Urine	*	

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

Exposure guidelines

US - California OELs: Skin designation

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

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

HEXANE (CAS 110-54-3)

Can be absorbed through the skin.

Can be absorbed through the skin.

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)

NAPHTHALENE (CAS 91-20-3)

Solvent Naphtha (petroleum), Medium Aliph. (CAS

Can be absorbed through the skin.

Can be absorbed through the skin.

Can be absorbed through the skin.

64742-88-7)

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

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 Wear safety glasses with side shields (or goggles).

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 if threshold limits are exceeded.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. 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 Hazy
Physical state Gas.
Form Aerosol.
Color Not available.
Odor Not available.

Not available. Odor threshold Not available.

Melting point/freezing point -94 °F (-70 °C) estimated Initial boiling point and boiling 314.6 °F (157 °C) estimated

range

104.0 °F (40.0 °C) estimated Flash point

Evaporation rate Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits Flammability limit - lower

0.7 % estimated

(%)

Flammability limit - upper

6 % estimated

(%)

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available.

0.34 hPa estimated Vapor pressure

Not available. Vapor density Relative density Not available.

Solubility(ies)

Insoluble Solubility (water) Not available. Partition coefficient

(n-octanol/water)

229 °F (109.44 °C) estimated **Auto-ignition temperature**

Not available. **Decomposition temperature** Not available. **Viscosity**

Other information

Density 7.33 lbs/gal estimated

Explosive properties Not explosive.

Flame extension None Flammability (flash back) No

Flammability class Combustible II estimated Heat of combustion (NFPA 29.47 kJ/g estimated

30B)

Oxidizing properties Not oxidizing. Percent volatile 25.62 % estimated 0.88 estimated Specific gravity < 24 % w/w VOC (Weight %)

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability**

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Strong oxidizing agents. Incompatible materials

No hazardous decomposition products are known. Hazardous decomposition

products

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.

Material name: Liquid Wrench White Lithium Grease L616, L616/4 Version #: 04 Revision date: 04-20-2016 Issue date: 04-29-2015 **Eye contact** Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Headache. May cause drowsiness and dizziness. Nausea, vomiting. Diarrhea. 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 Narcotic effects.

Narcolic effects.	
Species	Test Results
I (CAS 112-34-5)	
Rabbit	2700 mg/kg
D.I.	
Rat	> 29 ppm
Ovince wie	0000
	2000 mg/kg
	2400 mg/kg
	2200 mg/kg
Rat	4500 mg/kg
S 108-88-3)	
-	
Rabbit	12124 mg/kg
	14.1 ml/kg
Mouse	5320 ppm, 8 Hours
	400 ppm, 24 Hours
Rat	26700 ppm, 1 Hours
	12200 ppm, 2 Hours
	8000 ppm, 4 Hours
Rat	2.6 g/kg
IYL- (CAS 98-82-8)	
Mouse	2000 ppm, 7 Hours
	24.7 mg/l, 2 Hours
Rat	8000 ppm, 4 Hours
Rat	1400 mg/kg
00-41-4)	
D.11.7	47000
Rapbit	17800 mg/kg
Det	2500
кат	3500 mg/kg
	Species I (CAS 112-34-5) Rabbit Rat Guinea pig Mouse Rabbit Rat S 108-88-3) Rabbit Mouse Rat YL- (CAS 98-82-8) Mouse Rat Rat Rat Rat Rat Rat Rat Ra

Material name: Liquid Wrench White Lithium Grease
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Components Species Test Results

HEXANE (CAS 110-54-3)

Acute

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)

Acute Dermal

LD50 Rabbit

> 2 g/kg

Rat > 20 g/kg

Oral

LD50 Guinea pig 1200 mg/kg

Rat 490 mg/kg

Nonane (CAS 111-84-2)

Acute Inhalation

LC50 Rat 3200 ppm, 4 Hours

Zinc Oxide (CAS 1314-13-2)

Acute

Inhalation

LC50 Mouse > 5.7 mg/l, 4 Hours

Oral

LD50 Mouse 7950 mg/kg

Rat > 5 g/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye Causes serious eye irritation.

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)
ETHYLBENZENE (CAS 100-41-4)
NAPHTHALENE (CAS 91-20-3)
2B Possibly carcinogenic to humans.
2B Possibly carcinogenic to humans.
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.

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

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard Not likely, due to the form of the product.

Chronic effectsCauses damage to organs through prolonged or repeated exposure. Prolonged inhalation may be

harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
2-(2-butoxyéthoxy) Éthano	ol (CAS 112-34-5	5)	
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	1300 mg/l, 96 hours
BENZENE, METHYL- (CA	AS 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-METHYLETH	HYL- (CAS 98-82	2-8)	
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 1	00-41-4)		
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
HEXANE (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours
Low Odor Base Solvent (C	CAS 64742-47-8))	
Aquatic			
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours
Naphtha (petroleum), Hyd	rotreated 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
Zinc Oxide (CAS 1314-13-	-2)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2246 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 instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

under pressure. Do not puncture, incinerate or crush. 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. Do not re-use empty containers.

14. Transport information

DOT

UN number Not available.

UN proper shipping name Consumer Commodity

Transport hazard class(es)

Class ORM-D

Subsidiary risk -

Packing group Not applicable.

Environmental hazards

Marine pollutant Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging exceptions306Packaging non bulk302, 304Packaging bulk302, 314, 315

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable

Transport hazard class(es)

Class 2.1 Subsidiary risk -

Packing group Not applicable.

Environmental hazards Ye

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Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo Forbidden.

aircraft

Cargo aircraft only Forbidden.

IMDG

UN number UN1950 UN proper shipping name Aerosols Transport hazard class(es)

Class 2.1 Subsidiary risk

Packing group Not applicable.

Environmental hazards

Marine pollutant Yes F-D, S-U

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to

Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

IATA; IMDG



Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

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. Listed. ETHYLBENZENE (CAS 100-41-4) Listed. HEXANE (CAS 110-54-3) NAPHTHALENE (CAS 91-20-3) Listed. Nonane (CAS 111-84-2) Listed. Zinc Oxide (CAS 1314-13-2) 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)

Immediate Hazard - Yes **Hazard categories**

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

Material name: Liquid Wrench White Lithium Grease

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
2-(2-butoxyéthoxy) Éthanol	112-34-5	20 - < 30	
BENZENE, METHYL-	108-88-3	< 1	
BENZENE,1-METHYLETHYL-	98-82-8	< 1	
ETHYLBENZENE	100-41-4	< 1	
HEXANE	110-54-3	< 1	
NAPHTHALENE	91-20-3	< 1	

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

Not regulated.

(SDWA)

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)

Carbon Dioxide (CAS 124-38-9)

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)

Zinc Oxide (CAS 1314-13-2)

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)

Carbon Dioxide (CAS 124-38-9) 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) Zinc Oxide (CAS 1314-13-2)

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)

Carbon Dioxide (CAS 124-38-9) 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) Zinc Oxide (CAS 1314-13-2)

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)

Zinc Oxide (CAS 1314-13-2)

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)

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

ETHYLBENZENE (CAS 100-41-4)

NAPHTHALENE (CAS 91-20-3)

Titanium Dioxide (CAS 13463-67-7)

Listed: February 27, 1987

Listed: April 6, 2010

Listed: June 11, 2004

Listed: April 19, 2002

Listed: September 2, 2011

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

BENZENE (CAS 71-43-2)
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

On inventory (yes/no)* Country(s) or region Inventory name Europe European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Japan No Korea Existing Chemicals List (ECL) Yes New Zealand New Zealand Inventory Yes **Philippines** Philippine Inventory of Chemicals and Chemical Substances Yes (PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

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

 Issue date
 04-29-2015

 Revision date
 04-20-2016

Version # 04

HMIS® ratings Health: 2*

Flammability: 3 Physical hazard: 0

NFPA ratings Health: 2

Flammability: 3 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 Transport Information: Material Transportation Information

Material name: Liquid Wrench White Lithium Grease

L616, L616/4 Version #: 04 Revision date: 04-20-2016 Issue date: 04-29-2015 15 / 15

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).