

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 01/30/2017 Supersedes:09/03/2015 Version: 1.2

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product identifier** 

: Mixture Product form

: JOHNSEN'S WHITE LITHIUM GREASE 11 OZ. Trade name

Product code : 4604

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

: White Grease Lubricant Use of the substance/mixture

Details of the supplier of the safety data sheet

**Technical Chemical Company** P.O. BOX 139 Cleburne, Texas 76033 T 817-645-6088

**Emergency telephone number** 

Emergency number : CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)

#### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

#### **GHS-US** classification

Flam, Aerosol 1 H222 Compressed gas H280 Skin Irrit. 2 H315 Carc. 2 H351 Repr. 2 H361 STOT SE 3 H336 STOT RE 2 H373

Full text of H statements : see section 16

#### Label elements

#### **GHS-US** labeling

Hazard pictograms (GHS-US)



GHS04





GHS02

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H222 - Extremely flammable aerosol

H280 - Contains gas under pressure; may explode if heated

H315 - Causes skin irritation

H336 - May cause drowsiness or dizziness H351 - Suspected of causing cancer

H361 - Suspected of damaging fertility or the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) P201 - Obtain special instructions

P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from heat,sparks,open flames,hot surfaces. - No smoking P211 - Do not spray on an open flame or other ignition source

P251 - Pressurized container: Do not pierce or burn, even after use P260 - Do not breathe dust,fumes,gas,mist,vapor spray

P261 - Avoid breathing dust,fume,gas,mist,vapor spray P264 - Wash affected areas thoroughly after handling P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves, protective clothing, eye protection, face protection

P302+P352 - If on skin: Wash with plenty of soap and water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P308+P313 - If exposed or concerned: Get medical advice/attention P312 - Call a POISON CONTROL CENTER, doctor, if you feel unwell.

P314 - Get medical advice/attention if you feel unwell P321 - Specific treatment: See section 4.1 on SDS

P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P410+P403 - Protect from sunlight. Store in a well-ventilated place

30/01/2017 EN (English US) 1/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

#### 2.3. Other hazards

Other hazards not contributing to the classification

: Contains gas under pressure; may explode if heated. None under normal conditions.

#### 2.4. Unknown acute toxicity (GHS US)

No data available

### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Heptane, Branched Cyclic	(CAS No) 426260-76-6	40.2816 - 41.96	Flam. Liq. 1, H224 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Petroleum Gases, Liquefied, Sweetened	(CAS No) 68476-86-8	30 - 50	Flam. Gas 1, H220 Compressed gas, H280
n-Heptane	(CAS No) 142-82-5	10.49 - 18.882	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Distillates (Petroleum), Hydrotreated Heavy Naphthenic	(CAS No) 64742-52-5	< 16.182	Asp. Tox. 1, H304
12-Hydroxystearic Acid	(CAS No) 106-14-9	< 1.798	Not classified
Toluene	(CAS No) 108-88-3	0.4196 - 1.6784	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
Lithium Hydroxide, Monohydrate	(CAS No) 1310-66-3	< 0.899	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
Titanium (IV) Oxide	(CAS No) 13463-67-7	< 0.899	Carc. 2, H351
Polytetrafluoroethylene	(CAS No) 9002-84-0	< 0.1798	Not classified

The exact percentage is a trade secret.

#### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

First-aid measures general

: Never give anything by mouth to an unconscious person. Suspected of causing cancer. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation

: Cough. 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.

First-aid measures after skin contact

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

First-aid measures after eye contact

: Direct contact with the eyes is likely to be irritating. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion

: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries

: Suspected of damaging fertility or the unborn child. Causes damage to organs.

Symptoms/injuries after inhalation

 $: \ \, \hbox{Shortness of breath. May cause drowsiness or dizziness}.$ 

Symptoms/injuries after skin contact

: Itching. Red skin. Skin rash/inflammation. Causes skin irritation.

Symptoms/injuries after eye contact

: May cause slight eye irritation . May cause severe irritation. Irritation of the eye tissue.

Inflammation/damage of the eye tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion

: May be harmful if swallowed and enters airways. May be fatal if swallowed and enters airways.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

30/01/2017 EN (English US) 2/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable aerosol.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of

burns and injuries.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire

reaches explosives. Evacuate area.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Aerosol level 3.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : No open flames. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove

ignition sources. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust, fume, gas, mist, vapor spray.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Dam up the liquid spill. Contain released substance, pump into suitable containers. Plug the

leak, cut off the supply.

Methods for cleaning up : Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

#### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or

burn, even after use.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not spray on an open flame or other ignition source. Obtain special instructions. Do not handle until all safety precautions have been read and understood. Avoid breathing

dust,fume,gas,mist,vapor spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

Wash affected areas thoroughly after handling. Always wash hands after handling the product. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash hands and other exposed areas with mild soap and water before eating,

drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. Proper grounding procedures to avoid static electricity

should be followed.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Do not expose to

temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

Storage area : Store in a well-ventilated place.

### 7.3. Specific end use(s)

Follow Label Directions.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)			
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³ MIST 8 HOURS	

30/01/2017 EN (English US) 3/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)			
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³ MIST 8 HOURS	
Titanium (IV) Oxide (1	3463-67-7)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (Titanium dioxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)	
Toluene (108-88-3)			
USA ACGIH	ACGIH TWA (mg/m³)	75 mg/m³	
USA ACGIH	ACGIH TWA (ppm)	20 ppm	
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm	
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm	
n-Heptane (142-82-5)		,	
USA ACGIH	ACGIH TWA (ppm)	400 ppm (Heptane, all isomers; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)	
USA ACGIH	ACGIH STEL (ppm)	500 ppm (Heptane, all isomers; USA; Short time value; TLV - Adopted Value)	
Heptane, Branched C	yclic (426260-76-6)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm	
USA ACGIH	ACGIH STEL (ppm)	500 ppm	
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm	
Petroleum Gases, Liquefied, Sweetened (68476-86-8)			
USA ACGIH	ACGIH TWA (ppm)	1000 ppm Listed under Aliphatic hydrocarbon gases alkane C1-C4	
USA OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³	
USA OSHA OSHA PEL (TWA) (ppm) 1000 ppm			
8.2. Exposure controls			

: Provide adequate general and local exhaust ventilation. Ensure good ventilation of the work Appropriate engineering controls

station. Local exhaust venilation, vent hoods.

Personal protective equipment Gloves. Safety glasses. Avoid all unnecessary exposure.





: GIVE EXCELLENT RESISTANCE: Materials for protective clothing

Hand protection : Wear chemically resistant protective gloves. Wear protective gloves.

Eye protection : Face shield. Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Where exposure through inhalation may occur from use, respiratory protection equipment is Respiratory protection

recommended.

Environmental exposure controls : Avoid release to the environment.

: Avoid contact during pregnancy/while nursing. Consumer exposure controls

Other information : Do not eat, drink or smoke during use.

#### SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Physical state : Gas Appearance : Liquid. Color : White. Odor Sweet

Odor threshold No data available : No data available рΗ Relative evaporation rate (butyl acetate=1) : No data available : No data available Melting point Freezing point : No data available

Boiling point : 88 °C (Lowest Component) Flash point : -9 °C (Lowest Component)

Auto-ignition temperature : No data available

EN (English US) 30/01/2017 4/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapor pressure : No data available Relative vapor density at 20 °C : No data available

Relative density : 0.78

Solubility : Insoluble in water.
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

Explosive properties : Heating may cause a fire or explosion.

Oxidizing properties : No data available Explosion limits : No data available

9.2. Other information

VOC content : 82 %

Gas group : Compressed gas

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions. Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

#### 10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide.

### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Lithium Hydroxide, Monohydrate (1310-66-3)			
LD50 oral rat	368 mg/kg body weight (Rat; Weight of evidence; 491 mg/kg bodyweight; Rat; Weight of evidence)		
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)		
LC50 inhalation rat (mg/l)	> 6.15 mg/l/4h (Rat; Experimental value)		
Distillates (Petroleum), Hydrotreated Heavy N	aphthenic (64742-52-5)		
LD50 oral rat	> 5000 mg/kg body weight		
Titanium (IV) Oxide (13463-67-7)			
LD50 oral rat	> 10000 mg/kg (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value; > 5000 mg/kg bodyweight; Rat; Experimental value)		
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Literature study)		
LC50 inhalation rat (mg/l)	> 6.8 mg/l/4h (Rat; Experimental value)		
Toluene (108-88-3)			
LD50 oral rat	5580 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Literature study; 5580 mg/kg bodyweight; Rat; Experimental value)		
LD50 dermal rabbit	> 5000 mg/kg body weight LD50 quoted as 14.1 mL/kg (12267 mg/kg using density of 0.87)		
LC50 inhalation rat (mg/l)	> 28.1 mg/l/4h (Rat; Air, Literature study)		
n-Heptane (142-82-5)			
LD50 oral rat	> 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)		

30/01/2017 EN (English US) 5/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

n-Heptane (142-82-5)	
LD50 dermal rabbit	> 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across)
LC50 inhalation rat (mg/l)	103 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	25000 ppm/4h (Rat; Literature study)
Heptane, Branched Cyclic (426260-76	i-6)
LD50 oral rat	> 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)
LD50 dermal rabbit	> 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across)
LC50 inhalation rat (mg/l)	103 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	25000 ppm/4h (Rat; Literature study)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Distillates (Petroleum), Hydrotreated	Heavy Naphthenic (64742-52-5)
IARC group	3

r the unborn child.

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated : May cause damage to organs thro

exposure)

окросито)

: May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : Shortness of breath. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Itching. Red skin. Skin rash/inflammation. Causes skin irritation.

Symptoms/injuries after eye contact : May cause slight eye irritation . May cause severe irritation. Irritation of the eye tissue.

Inflammation/damage of the eye tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion : May be harmful if swallowed and enters airways. May be fatal if swallowed and enters airways.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Lithium Hydroxide, Monohydrate (1310-66-3)	
LC50 fish 1	109 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Danio rerio; Static system; Fresh water; Experimental value)
EC50 Daphnia 1	33.5 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Calculated value)
Threshold limit algae 1	41.62 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
Threshold limit algae 2	153.44 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
Titanium (IV) Oxide (13463-67-7)	
EC50 Daphnia 1	> 100 mg/l (LC50; Equivalent or similar to OECD 202; 48 h; Daphnia magna; Static system; Fresh water; Weight of evidence)
Threshold limit algae 1	61 mg/l (EC50; Other; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)
n-Heptane (142-82-5)	
EC50 Daphnia 1	0.2 mg/l (LC50; Other; 96 h; Chaetogammarus marinus; Semi-static system; Salt water; Experimental value)

30/01/2017 EN (English US) 6/12

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.2. Persistence and degradability	
JOHNSEN'S WHITE LITHIUM GREASE 11 OZ.	
Persistence and degradability	Not established.
Lithium Hydroxide, Monohydrate (1310-66-3)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
12-Hydroxystearic Acid (106-14-9)	
Persistence and degradability	Readily biodegradable in water.
Distillates (Petroleum), Hydrotreated Heavy N	laphthenic (64742-52-5)
Persistence and degradability	Not established.
Titanium (IV) Oxide (13463-67-7)	
Persistence and degradability	Biodegradability: not applicable. Low potential for mobility in soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
Polytetrafluoroethylene (9002-84-0)	
Persistence and degradability	No test data available. No (test)data on mobility of the substance available.
	110 tool data available. The (tool)data on mobility of the substance available.
Toluene (108-88-3)  Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	Readily blodegradable in water. Blodegradable in the soil. Low potential for adsorption in soil. $2.15 \text{ g O}_2$ /g substance
Chemical oxygen demand (COD)	2.13 g $O_2$ /g substance
ThOD	3.13 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.69
	0.00
n-Heptane (142-82-5) Persistence and degradability	Readily biodegradable in water. Forming sediments in water. Biodegradable in the soil. Low
	potential for adsorption in soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	1.92 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	0.06 g O <sub>2</sub> /g substance
ThOD	3.52 g O <sub>2</sub> /g substance
BOD (% of ThOD)	> 0.5 (5 days; Literature study)
Heptane, Branched Cyclic (426260-76-6)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Petroleum Gases, Liquefied, Sweetened (684)	76-86-8)
Persistence and degradability	Not established.
12.3. Bioaccumulative potential	
JOHNSEN'S WHITE LITHIUM GREASE 11 OZ.	
Bioaccumulative potential	Not established.
Lithium Hydroxide, Monohydrate (1310-66-3)	
Bioaccumulative potential	Bioaccumulation: not applicable.
12-Hydroxystearic Acid (106-14-9)	
Log Pow	0
Bioaccumulative potential	No bioaccumulation data available.
Distillates (Petroleum), Hydrotreated Heavy N	
Bioaccumulative potential	Not established.
,	NOT COTADIIOTICA.
Titanium (IV) Oxide (13463-67-7)	Not his accumulative
Bioaccumulative potential	Not bioaccumulative.
Polytetrafluoroethylene (9002-84-0)	
Bioaccumulative potential	No test data available.
Toluene (108-88-3)	
BCF fish 2	90 (BCF; 72 h; Leuciscus idus; Static system; Fresh water)
Log Pow	2.73 (Experimental value; Other; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
n-Heptane (142-82-5)	
BCF other aquatic organisms 1	552 (BCF; BCFBAF v3.00)
00/04/0047	

30/01/2017 EN (English US) 7/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

tortaing to reductal register / vol. 77, two 50 / Worlddy, Walton 20, 2012 / Rules and Regulations				
n-Heptane (142-82-5)				
Log Pow	4.66 (Experimental value; 4.5; Literature study)			
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).			
Heptane, Branched Cyclic (426260-7	Heptane, Branched Cyclic (426260-76-6)			
Bioaccumulative potential	Not established.			
Petroleum Gases, Liquefied, Sweetened (68476-86-8)				
Bioaccumulative potential	Not established.			
12.4. Mobility in soil				
Toluene (108-88-3)				
Surface tension	0.03 N/m (20 °C)			
n-Heptane (142-82-5)				
Surface tension	0.019 N/m (25 °C; 0.020 N/m; 20 °C)			
Log Koc	log Koc,SRC PCKOCWIN v2.0; 2.38; Calculated value			

#### 12.5. Other adverse effects

Other information : Avoid release to the environment.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Container under

pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Additional information : Flammable vapors may accumulate in the container.

Ecology - waste materials : Avoid release to the environment.

### **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): UN1950, Aerosols, 2.1, Limited Quantity ICAO/IATA (air): UN1950, Aerosols, 2.1, Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.1 (Marine Pollutant-Heptane), Limited Quantity

Special Provisions: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Aerosols

Flammable, (each not exceeding 1 L capacity)

Class (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT) : 2.1 - Flammable gas



DOT Special Provisions (49 CFR 172.102) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Packaging Non Bulk (49 CFR 173.xxx) : None

DOT Packaging Bulk (49 CFR 173.xxx) : None

#### 14.3. Additional information

Other information : No supplementary information available.

### **Overland transport**

No additional information available

#### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel

DOT Vessel Stowage Other : 48 - Stow "away from" sources of heat,87 - Stow "separated from" Class 1 (explosives) except

Division 14,126 - Segregation same as for Class 9, miscellaneous hazardous materials

Subsidiary risks (IMDG) : Marine Pollutant-Heptane

30/01/2017 EN (English US) 8/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 75 kg

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg

CFR 175.75)

### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

JOHNSEN'S WHITE LITHIUM GREASE 11 OZ.		
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard	
	Immediate (acute) health hazard	
	Sudden release of pressure hazard	

#### Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)

SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard

#### Toluene (108-88-3)

Subject to reporting requirements of United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302

SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard

Immediate (acute) health hazard

### Heptane, Branched Cyclic (426260-76-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes

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

### Petroleum Gases, Liquefied, Sweetened (68476-86-8)

SARA Section 311/312 Hazard Classes

Immediate (acute) health hazard
Fire hazard
Sudden release of pressure hazard

#### 15.2. International regulations

### **CANADA**

JOHNSEN'S WHITE LITHIUM GREASE 11 OZ.				
WHMIS Classification	Class B Division 5 - Flammable Aerosol			
Toluene (108-88-3)				
Listed on the Canadian DSL (Domestic Substanc	Listed on the Canadian DSL (Domestic Substances List)			
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects			
Heptane, Branched Cyclic (426260-76-6)				
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects			

### **EU-Regulations**

#### Toluene (108-88-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Heptane, Branched Cyclic (426260-76-6)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.1; R45 Muta.Cat.2; R46 Repr.Cat.3; R63 F+; R12 Xi; R36/37/38

Full text of R-phrases: see section 16

### 15.2.2. National regulations

#### Heptane, Branched Cyclic (426260-76-6)

All components are either listed on the US TSCA Inventory, or are not regulated under TSCA under 40 CFR 720.30.

30/01/2017 EN (English US) 9/12

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

		26, 2012 / Rules and Regulations			
15.3. US State regulations					
JOHNSEN'S WHITE LITHI					
U.S California - Proposition 65 - Carcinogens List		No			
U.S California - Proposition 65 - Developmental Toxicity		No			
U.S California - Proposition 65 - Reproductive Toxicity - Female		No			
U.S California - Proposition Toxicity - Male	on 65 - Reproductive	No			
State or local regulations		U.S California - Proposition	65		
Lithium Hydroxide, Monol	hydrate (1310-66-3)				
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level	
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)	
No	No	No	No		
12-Hydroxystearic Acid (1	06-14-9)				
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level	
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)	
No	No	No	No		
Distillates (Petroleum), Hy	drotreated Heavy Naphthe	nic <b>(64742-52-5)</b>			
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level	
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)	
No	No	No	No		
Titanium (IV) Oxide (13463	3-67-7)				
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level	
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)	
No	No	No	No		
Polytetrafluoroethylene (9	002-84-0)				
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level	
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)	
No	No	No	No		
Toluene (108-88-3)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)	
No	Yes	No	No		
n-Heptane (142-82-5)				1	
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level	
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)	
No	No	No	No		
Heptane, Branched Cyclic	(426260-76-6)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)	
No	No	No	No		
	•	•	•	•	

30/01/2017 EN (English US) 10/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Petroleum Gases, Liquefied, Sweetened (68476-86-8)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	

### Toluene (108-88-3)

### State or local regulations

U.S. - California - Proposition 65

U.S. - New Jersey - Special Health Hazards Substances List

New Jersey Right-to-Know

U.S. - Massachusetts - Right To Know List

Rhode Island Right to Know

U.S. - Michigan - Critical Materials List

U.S. - New Jersey - Environmental Hazardous Substances List

U.S. - Illinois - Toxic Air Contaminants

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

### Petroleum Gases, Liquefied, Sweetened (68476-86-8)

### State or local regulations

New Jersey Right-to-Know Minnesota Right-to-Know Rhode Island Right to Know

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - Massachusetts - Right To Know List

### **SECTION 16: Other information**

Other information : None.

Full text of H-phrases:

H220	Extremely flammable gas
H222	Extremely flammable aerosol
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated
	exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard : 2 - Intense or continued exposure could cause temporary

incapacitation or possible residual injury unless prompt

medical attention is given.

NFPA fire hazard 4 - Will rapidly or completely vaporize at normal pressure

and temperature, or is readily dispersed in air and will burn

readily.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.

#### **HMIS III Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

: 4 Severe Hazard Flammability Physical : 1 Slight Hazard

: B Personal Protection

SDS US (GHS HazCom 2012) - TCC

30/01/2017 EN (English US) 11/12

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

The Supplier identified in Section 1 of this SDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

30/01/2017 EN (English US) 12/12