

SAFETY DATA SHEET

SDS: 1251

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012

Revision Date 02-05-2019

Revision Number 1.1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

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

Identified uses Lubricant

Uses advised against Consumer use

1.3. Details of the supplier of the safety data sheet

Importer Master Fluid Solutions 501 W. Boundary Street Perrysburg, OH 43551 USA +1 419-874-7902 Manufacturer Lubrication Engineers Inc. 1919 E. Tulsa Wichita, KS 67216 USA 800-537-7683

For further information, please contact

techsupport@le-inc.net

1.4. Emergency telephone number

Emergency Telephone

CHEMTREC: +1-703-527-3887 (INTERNATIONAL) 1-800-424-9300 (NORTH AMERICA)

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012

Revision Date 02-05-2019

Revision Number 1.1

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Chronic aquatic toxicity

Category 3 - (H412)

2.2. Label Elements

Product Identifier Contains Residual oils (petroleum), solvent dewaxed Signal word None

Hazard Statements

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P201 - Obtain special instructions before use, P202 - Do not handle until all safety precautions have been read and understood, P273 - Avoid release to the environment, P280 - Wear protective gloves/protective clothing/eye protection/face protection, P308 + P313 - IF exposed or concerned: Get medical advice/attention, P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other Hazards Other hazards

May be harmful in contact with skin Harmful to aquatic life

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Chemical name	EC-No	CAS No.	Weight-%	Classification (Reg. 1272/2008)	REACH Registration Number
Diacetone alcohol	Present	123-42-2	1 - 5	Eye Irrit. 2 (H319)	no data available
Vermiculite	-	1318-00-9	0.1 - 1	No data available	no data available
Butylated Hydroxy Toluene	Present	128-37-0	0.1 - 1	No data available	no data available
Silica, quartz	Present	14808-60-7	0.1 - 1	No data available	no data available
Mica (mineral)	-	12001-26-2	0.1 - 1	No data available	no data available
Titanium Dioxide	Present	13463-67-7	< 0.1	No data available	no data available
Iron Oxide	Present	1309-37-1	< 0.1	No data available	no data available

The producer of "1251" declares that it contains less than 3% DMSO extractable material by IP-346

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice

If symptoms develop move victim to fresh air. Show this safety data sheet to the doctor in

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012	Revision Date 02-05-2019	Revision Number 1.1			
	attendance. Do not breathe dust/fume/gas/mist/va	oors/spray.			
Inhalation	Move to fresh air. If symptoms persist, call a physic	cian.			
Skin Contact	Consult a physician if necessary. Wash off immedi removing all contaminated clothes and shoes.	ately with soap and plenty of water			
Eye Contact	Rinse thoroughly with plenty of water, also under th rinsing. Call a physician if irritation persists.	ne eyelids. Keep eye wide open while			
Ingestion	Drink plenty of water. Do NOT induce vomiting. Ne unconscious person. Consult a physician.	ver give anything by mouth to an			
Protection of First-aiders	Use personal protective equipment.				
4.2. Most important symptoms a	4.2. Most important symptoms and effects, both acute and delayed				
Symptoms	None known.				
4.3. Indication of any immediate	medical attention and special treatment needed				
Notes to Physician	Treat symptomatically.				

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media	Water spray, Carbon dioxide (CO2), Foam, Dry chemical	
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.	
Flash Point	287 °C / 548.6 °F	

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions Do not touch or walk through spilled material. Remove all sources of ignition.

6.2. Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012

Revision Date 02-05-2019

Revision Number 1.1

 Methods for Cleaning up
 Use personal protective equipment. Dam up. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly.

 6.4. Reference to other sections
 See Section 12 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handlingAvoid contact with skin, eyes and clothing. Wear personal protective equipment. Prevent
vapor buildup by providing adequate ventilation during and after use. Do not eat, drink or
smoke when using this product.Hygiene MeasuresHandle in accordance with good industrial hygiene and safety practice.7.2. Conditions for safe storage, including any incompatibilitiesKeep container tightly closed in a dry and well-ventilated place. Keep out of the reach of
children.7.3. Specific and use(s)Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational Exposure limits

Chemical name	European Union	The United Kingdom	France	Spain	Germany
Diacetone alcohol	-	STEL 75 ppm	TWA 50 ppm	TWA 50 ppm	AGW 20 ppm
123-42-2		STEL 362 mg/m ³	TWA 240 mg/m ³	TWA 241 mg/m ³	AGW 96 mg/m ³
		TWA 50 ppm			H*
		TWA 241 mg/m ³			
Butylated Hydroxy Toluene	-	STEL 30 mg/m ³	TWA 10 mg/m ³	TWA 10 mg/m ³	AGW 10 mg/m ³
128-37-0		TWA 10 mg/m ³			
Silica, quartz	-	STEL 0.3 mg/m ³	TWA 0.1 mg/m ³	TWA 0.05 mg/m ³	-
14808-60-7		TWA 0.1 mg/m ³			
Mica (mineral)	-	STEL 30 mg/m ³	-	TWA 3 mg/m ³	-
12001-26-2		STEL 2.4 mg/m ³		-	
		TWA 10 mg/m ³			
		TWA 0.8 mg/m ³			
Titanium Dioxide	-	STEL 30 mg/m ³	TWA 10 mg/m ³	TWA 10 mg/m ³	-
13463-67-7		STEL 12 mg/m ³			
		TWA 10 mg/m ³			
		TWA 4 mg/m ³			
Iron Oxide	-	STEL 10 mg/m ³	TWA 5 mg/m ³	TWA 5 mg/m ³	-
1309-37-1		STEL 30 mg/m ³	TWA 10 mg/m ³		
		STEL 12 mg/m ³			
		TWA 5 mg/m ³			
		TWA 10 mg/m ³			
		TWA 4 mg/m ³			
Chemical name	Italy	Portugal	The Netherlands	Finland	Denmark

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012

Revision Date 02-05-2019

Revision Number 1.1

Diacetone alcohol 123-42-2	-	TWA 50 ppm	-	TWA 50 ppm TWA 240 mg/m ³ STEL 75 ppm	TWA 50 ppm TWA 240 mg/m ³
Butylated Hydroxy Toluene	-	TWA 2 mg/m ³	-	STEL 360 mg/m³ TWA 10 mg/m³	TWA 10 mg/m ³
128-37-0 Silica, quartz 14808-60-7	-	C(A4) TWA 0.025 mg/m ³ C(A2)	TWA 0.075 mg/m ³	STEL 20 mg/m ³ TWA 0.05 mg/m ³	TWA 0.3 mg/m ³
Mica (mineral) 12001-26-2	-	TWA 3 mg/m ³	-	-	TWA 0.1 mg/m ³
Titanium Dioxide 13463-67-7	-	TWA 10 mg/m ³ C(A4)	-	-	TWA 6 mg/m ³
Iron Oxide 1309-37-1	-	TWA 5 mg/m ³ C(A4)	-	TWA 5 mg/m ³	TWA 3.5 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Diacetone alcohol 123-42-2	H* TWA 50 ppm TWA 240 mg/m ³	H* TWA 20 ppm TWA 96 mg/m ³ STEL 40 ppm STEL 192 mg/m ³	TWA 240 mg/m ³	TWA 25 ppm TWA 120 mg/m ³ STEL 37.5 ppm STEL 150 mg/m ³	TWA 50 ppm TWA 240 mg/m ³ STEL 150 ppm STEL 720 mg/m ³
Vermiculite 1318-00-9	STEL 10 mg/m ³ TWA 5 mg/m ³	-	-	-	-
Butylated Hydroxy Toluene 128-37-0	TWA 10 mg/m ³	SS-C** TWA 10 mg/m ³ C1 STEL 40 mg/m ³	-	-	TWA 10 mg/m ³ STEL 30 mg/m ³
Silica, quartz 14808-60-7	TWA 0.15 mg/m ³	SS-C** TWA 0.15 mg/m ³ C1	TWA 2 mg/m ³ TWA 0.3 mg/m ³ TWA 4.0 mg/m ³ TWA 1.0 mg/m ³	TWA 0.3 mg/m ³ TWA 0.1 mg/m ³ K** STEL 0.9 mg/m ³ STEL 0.3 mg/m ³	TWA 0.1 mg/m ³
Mica (mineral) 12001-26-2	TWA 10 mg/m ³	TWA 3 mg/m ³	-	TWA 6 mg/m ³ TWA 3 mg/m ³ STEL 12 mg/m ³ STEL 6 mg/m ³	TWA 10 mg/m ³ TWA 0.8 mg/m ³ STEL 30 mg/m ³ STEL 2.4 mg/m ³
Titanium Dioxide 13463-67-7	STEL 10 mg/m ³ TWA 5 mg/m ³	SS-C** TWA 3 mg/m ³	TWA 10.0 mg/m ³ TWA 10 mg/m ³ STEL 30 mg/m ³	TWA 5 mg/m ³ STEL 10 mg/m ³	TWA 10 mg/m ³ TWA 4 mg/m ³ STEL 30 mg/m ³ STEL 12 mg/m ³
Iron Oxide 1309-37-1	STEL 10 mg/m ³ TWA 5 mg/m ³ TWA 10 mg/m ³	TWA 3 mg/m ³	TWA 5 mg/m ³ STEL 10 mg/m ³	TWA 3 mg/m ³ STEL 6 mg/m ³	TWA 5 mg/m ³ TWA 10 mg/m ³ TWA 4 mg/m ³ STEL 30 mg/m ³ STEL 10 mg/m ³ STEL 12 mg/m ³
Chemical name	Hungary	Belgium	Czech Republic	Greece	Sweden
Diacetone alcohol 123-42-2		TWA 50 ppm TWA 241 mg/m ³	TWA 200 mg/m ³ Ceiling 300 mg/m ³	TWA 50 ppm TWA 240 mg/m ³ STEL 75 ppm STEL 360 mg/m ³	LLV 25 ppm LLV 120 mg/m ³ Indicative STLV 50 ppm Indicative STLV 240 mg/m ³
Butylated Hydroxy Toluene 128-37-0	-	TWA 2 mg/m ³	-	TWA 10 mg/m ³	-
Silica, quartz 14808-60-7	TWA 0.15mg/m ³	TWA 0.1 mg/m ³	TWA 0.1 mg/m ³	-	LLV 0.1 mg/m ³ C
Mica (mineral) 12001-26-2	-	TWA 3 mg/m ³	TWA 2.0 mg/m ³	-	-
Titanium Dioxide 13463-67-7	-	TWA 10 mg/m ³	-	TWA 10 mg/m ³ TWA 5 mg/m ³	LLV 5 mg/m ³
Iron Oxide	TWA 6mg/m ³	TWA 5 mg/m ³	TWA 10 mg/m ³	TWA 10 mg/m ³	LLV 3.5 mg/m ³

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012

Revision Date 02-05-2019

Revision Number 1.1

1309-37-1	STEL 10 mg/m ³
Derived No Effect Level (DNEL)	No information available
Predicted No Effect Concentration (PNEC)	No information available.
8.2. Exposure controls	
Engineering Measures	Ensure adequate ventilation, especially in confined areas.
Personal protective equipmen Eye/Face Protection Hand Protection Skin and Body Protection Respiratory Protection	Tightly fitting safety goggles. Protective gloves. Long sleeved clothing. No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental Exposure Controls Do not allow material to contaminate ground water system.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	Paste
appearance	red
Odor	Hydrocarbon-like
Odor threshold	No information available

Property pH Melting point/freezing point Boiling point / boiling range Flash Point Evaporation rate Flammability (solid, gas) Vapor pressure Vapor Density Specific Gravity Water solubility Partition coefficient: n-octanol/wate Autoignition Temperature Decomposition Temperature Viscosity, kinematic	Values 6 - 8 No data available No data available 287 °C / 548.6 °F No data available No data available No data available < 1 (Air = 1) 0.95 negligible rNo data available No data available No data available No data available No data available No data available No data available
Explosive properties Oxidizing Properties	No data available No data available
exite ing i reportion	

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known.

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012

Revision Date 02-05-2019

Revision Number 1.1

10.2. Chemical stability

Stable under normal conditions.

Explosion Data Sensitivity to Mechanical Impact Not impact sensitive. Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames.

10.3. Possibility of hazardous reactions

Hazardous reactions None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

The producer of "1251" declares that it contains less than 3% DMSO extractable material by IP-346

Inhalation Eye Contact Skin Contact Ingestion	May cause irritation of respiratory tract. Contact with eyes may cause irritation. May cause irritation. There is no data available for this product.		
Unknown Acute Toxicity	10.172% of the mixture consists of ingredient(s) of unknown toxicity.		
The following values are calculated based on chapter 3.1 of the GHS document			

ATEmix (oral) 5,121.80 mg/kg ATEmix (dermal) 2,079.80 mg/kg ATEmix (inhalation-dust/mist) 1,237.06 mg/l

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Residual oils (petroleum), solvent	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2.18 mg/L (Rat)4 h
dewaxed			
Diacetone alcohol	> 4 g/kg (Rat)	= 13630 mg/kg (Rabbit) = 13500	> 7.23 g/m³(Rat)8 h
	· ·	mg/kg (Rabbit)	
Benzenamine, N-phenyl-, reaction	> 5000 mg/kg (Rat)	-	-
products with 2,4,4-trimethylpentene			

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012

Revision Date 02-05-2019

Revision Number 1.1

Butylated Hydroxy Toluene	> 2930 mg/kg (Rat)	> 2000 mg/kg (Rat)	-			
Water	> 90 mL/kg (Rat)	-	-			
Titanium Dioxide	> 10000 mg/kg (Rat)	-	-			
Petroleum distillates, hydrotreated	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2180 mg/m³ (Rat)4 h			
light naphthenic						
Iron Oxide	> 10000 mg/kg (Rat)	-	-			
Quaternary ammonium compounds,	> 5000 mg/kg (Rat)	-	> 12.6 mg/L (Rat)4 h			
bis(hydrogenated tallow						
alkyl)dimethyl, salts with bentonite						
Skin corrosion/irritation	No information available.					
Serious eye damage/eye irritatio	n No information available.					
• · · · ·						
Sensitization	No information available.	No information available.				
		No information quailable				
Mutagenic Effects	No information available.					
Carcinogenic Effects	No information available					
Denne destine (assisted						
Reproductive toxicity	No information available.					
	No information available	No information available.				
STOT - single exposure No information available.						
STOT reported expective	No information available.					
STOT - repeated exposure No information available.						
Target Organ Effects Central nervous system (CNS), Respiratory system, Eyes, Liver, Skin.			Liver Skin			
Target Organ Effects	Central hervous system (C	Central hervous system (CNO), respiratory system, Eyes, Liver, Skill.				
Aspiration Hazard	No information available	No information available.				
Aspiration nazaru	NO INICITIALION AVAIIADIE.					

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

Harmful to aquatic life with long lasting effects Harmful to aquatic life

Chemical name	Algae/aquatic plants	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
Diacetone alcohol	-	LC50= 420 mg/L Lepomis macrochirus 96 h	EC50 = 8750 mg/L 24 h
Butylated Hydroxy Toluene	EC50 = 6 mg/L 72 h EC50 > 0.42 mg/L 72 h	-	-

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Chemical name	Log Pow

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012

Revision Date 02-05-2019

Revision Number 1.1

Diacetone alcohol	1.03
Butylated Hydroxy Toluene	4.17

12.4. Mobility in soil

Mobility in soil

No information available.

Mobility

The product is insoluble and floats on water.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused Products	Dispose of in accordance with local regulations.
Contaminated Packaging	Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.
OTHER INFORMATION	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

IMDG Not regulated

ADR/RID Not regulated

ICAO/IATA Not regulated

Section 15: REGULATORY INFORMATION

3

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

WGK Classification (VwVwS)

International Inventories Complies TSCA Complies DSL/NDSL Not determined

Version EU

1251 ALMASOL® HIGH TEMPERATURE LUBRICANT

Issuing Date 04-24-2012

Revision Date 02-05-2019

Revision Number 1.1

EINECS/ELINCS	Not determined
ENCS	Not determined
IECSC	Complies
KECL	Not determined
PICCS	Complies
AICS	Complies

Legend

 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

 ENCS - Japan Existing and New Chemical Substances

 IECSC - China Inventory of Existing Chemical Substances

 KECL - Korean Existing and Evaluated Chemical Substances

 PICCS - Philippines Inventory of Chemicals and Chemical Substances

 AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment No information available

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation

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Reason for revision	Update to Format.

Disclaimer

The information provided in this Material 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.

SDS is available at www.LElubricants.com

End of Safety Data Sheet