

# 6401 MONOLEC® R&O COMPRESSOR/TURBINE OIL

**Issuing Date** 04-24-2012

Revision Date 05-13-2020

Revision Number 4.1

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# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier		
Product Name	6401 MONOLEC®	R&O COMPRESSOR/TURBINE OIL

Other means of identification Synonyms

No information available

## Recommended use of the chemical and restrictions on use

Identified uses Lubricant

Uses advised against Consumer use

# Details of the supplier of the safety data sheet

Manufacturer Lubrication Engineers Inc. 1919 E. Tulsa Wichita, KS 67216 USA 800-537-7683 Emergency Telephone Number

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

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# 2. HAZARDS IDENTIFICATION

Classification

**OSHA Regulatory Status** 

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

		Emergency O			]
		Signal Wo None	ora		
		None			
		Hazard State	ments		
		None			
The	product contains no substances which	at their given con	centration, are considered to be haz	ardous	to health
appearance	red	Physical state	liquid	Odor	Hydrocarbon-like
Precautional	y Statements - Prevention				
None.					
Response					
None.					
Eyes					
None.					
Skin					
None.					
Inhalation					
None.					
Ingestion					
None.					
Fire					
None.					
Spill					
None.					
Storage					
None.					
Disposal					
None.					
Hazards not	otherwise classified (HNOC)				

None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

The producer of "6401" declares that it contains less than 3% DMSO extractable material by IP-346

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4. FIRST AID MEASURES				
First Aid Measures				
General Advice	If symptoms develop move victim to fresh air. Show this safety attendance. Do not breathe dust/fume/gas/mist/vapors/spray.	data sheet to the doctor in		
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while insing.			
Skin Contact	Consult a physician if necessary. Wash off immediately with so removing all contaminated clothes and shoes.	ap and plenty of water while		
Inhalation	Move to fresh air. Consult a physician. If not breathing, give art	ificial respiration.		
Ingestion	May cause adverse kidney effects. Drink plenty of water. Do No	OT induce vomiting.		
Protection of First-aiders	Use personal protective equipment.			
Most important symptoms and effe	cts, both acute and delayed			
Symptoms	None known.	None known.		
Indication of any immediate medica	al attention and special treatment needed			
Notes to Physician	Treat symptomatically.			
5. FIRE-FIGHTING MEASURE	S			
Flash Point	210 °C / 410 °F			
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.			
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating gases and vapors.			
<u>Explosion Data</u> Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t Not impact sensitive. May be ignited by friction, heat, sparks or flames.			
Protective Equipment and Precautions for Firefighters	Wear self-contained breathing apparatus and protective suit.			
NFPA Health haz	ard 1 Flammability 1 Stability 1			
6. ACCIDENTAL RELEASE N	EASURES			
Personal precautions, protective ed	uipment and emergency procedures			
Personal Precautions	Do not touch or walk through spilled material. Remove all sources of ignition.			

Environmental Precautions

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Environmental Precautions	Prevent entry into waterways, sewers, basements or confined an accumulating to form explosive concentrations. Vapors can accumulating to form explosive concentrations.	
Methods and material for contain	ment and cleaning up	
Methods for Containment	Prevent further leakage or spillage if safe to do so. Absorb spill v sand or earth), then place in a chemical waste container.	vith inert material (e.g. dry
Methods for Cleaning up	Use personal protective equipment. Dam up. Take up mechanic containers for disposal. Clean contaminated surface thoroughly.	
7. HANDLING AND STORAG	3E	
Precautions for safe handling		
Advice on safe handling	Avoid contact with skin, eyes and clothing. Wear personal protect vapor buildup by providing adequate ventilation during and after smoke when using this product.	
Conditions for safe storage, inclu	ding any incompatibilities	
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place. children.	Keep out of the reach of
Incompatible products.	Strong oxidizing agents. Strong acids. Strong bases.	

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
White Mineral Oil	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup>
8042-47-5		(vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
		. , .	STEL: 10 mg/m <sup>3</sup>
Diphenylamine	TWA: 10 mg/m <sup>3</sup>	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
122-39-4			-
Phenol	TWA: 5 ppm	TWA: 5 ppm	IDLH: 250 ppm
108-95-2	S*	TWA: 19 mg/m <sup>3</sup>	Ceiling: 15.6 ppm
		(vacated) TWA: 5 ppm	Ceiling: 60 mg/m <sup>3</sup>
		(vacated) TWA: 19 mg/m <sup>3</sup>	TWA: 5 ppm
		(vacated) S*	TWA: 19 mg/m <sup>3</sup>
		S*	-

#### Appropriate engineering controls

Engineering Measures	Showers
	Eyewash stations
	Ventilation systems.

## Individual protection measures, such as personal protective equipment

- **Eye/Face Protection** Eye protection not needed during typical product use conditions. Wear eye protection as appropriate when handling the bulk formulation.
- Skin and Body Protection Long sleeved clothing. Protective gloves.

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Respiratory ProtectionNo protective equipment is needed under normal use conditions. If exposure limits are<br/>exceeded or irritation is experienced, ventilation and evacuation may be required.Hygiene MeasuresHandle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties Physical state appearance Odor Odor threshold	liquid red Hydrocarbon-like No information available
Property	Property
pH Melting Point / Freezing Point Boiling Point/Range Flash Point Upper flammability limit: Lower Flammability Limit Vapor pressure Vapor Density Specific Gravity Water solubility Partition Coefficient: n-octanol/water Autoignition Temperature Decomposition Temperature Viscosity, kinematic	6 - 8 No data available no data available 210 °C / 410 °F No data available No data available No data available < 1 (Air = 1) 0.87 negligible no data available No data available No data available 31.87 cSt @ 40°C

# **10. STABILITY AND REACTIVITY**

<u>reactivity</u>	No information available
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	Heat, flames and sparks. Contact with other chemicals
Incompatible Materials	Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)

# 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information
Inhalation	May cause irritation of respiratory tract.

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Eye Contact	Contact with eyes may cause irritation.	
Skin Contact	May cause irritation.	
Ingestion	There is no data available for this product.	
Component Information		
Information on toxicological effect	ots	
Symptoms	No information available.	
Delayed and immediate effects as	well as chronic effects from short and long-term exposure	
The producer of "6401" declares that	at it contains less than 3% DMSO extractable material by IP-346	
Sensitization	No information available.	
Mutagenic Effects	No information available.	
Carcinogenicity	No information available.	
Reproductive toxicity	No information available.	
Target Organ Effects	Respiratory system, Eyes, Skin.	
Numerical measures of toxicity	Product Information	
The following values are calculat ATEmix (oral) ATEmix (dermal)	ed based on chapter 3.1 of the GHS document . 15345 mg/kg 6139 mg/kg	
12. ECOLOGICAL INFORM	ATION	
Ecotoxicity	None known	
Persistence and Degradability	No information available.	
Bioaccumulation	No information available.	
<u>Mobility</u>	The product is insoluble and floats on water.	
Other Adverse Effects	No information available	
13. DISPOSAL CONSIDERA	TIONS	
Waste treatment methods		

Waste Disposal Methods

Dispose of in accordance with local regulations.

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## **Contaminated Packaging**

Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Diphenylamine		Included in waste streams:		
122-39-4		F039, K083, K104		
Phenol	U188	Included in waste streams:		
108-95-2		F039, K001, K022, K087		
		Included in waste stream:		
		K060		

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste Status
Diphenylamine	Toxic
122-39-4	
Phenol	Toxic
108-95-2	Corrosive

# **14. TRANSPORT INFORMATION**

DOT

Not regulated

15. REGULATO	DRY INFORMATION
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International Inventories	
TSCA	Complies
DSL/NDSL	Not determined
NDSL	Not determined
EINECS	Not determined
ELINCS	Not determined
ENCS	Not determined
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

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

## U.S. Federal Regulations

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## <u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0	64742-65-0	90 - 100	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene - 68411-46-1	68411-46-1	0.1 - 1	
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C7-9 125643-61-0	125643-61-0	0.1 - 1	
21151 Proprietary Organsulfur-phosphorus Compounds - 9999-99-9	9999-99-9	0.1 - 1	
20095 Alkyl phenol - 9999-99-9	9999-99-9	0.1 - 1	
White Mineral Oil - 8042-47-5	8042-47-5	< 0.1	
N-1-naphthylaniline - 90-30-2	90-30-2	< 0.1	
Petroleum distillates, hydrotreated middle - 64742-46-7	64742-46-7	< 0.1	
Petroleum distillates, solvent dewaxed light paraffinic - 64742-56-9	64742-56-9	< 0.1	
Dilauryl Hydrogen Phosphite - 21302-09-0	21302-09-0	< 0.1	
21271 Long chain alkyl amide - 9999-99-9	9999-99-9	< 0.1	
Methyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate - 6386-38-5	6386-38-5	< 0.1	
Petroleum distillates, hydrotreated heavy naphthenic - 64742-52-5	64742-52-5	< 0.1	
Petroleum distillates, hydrotreated light - 64742-47-8	64742-47-8	< 0.1	
20095 Alkaryl Triazole - 9999-99-9	9999-99-9	< 0.1	
Methylene Bridged Polyalkyl Phenols - 68610-07-1	68610-07-1	< 0.1	
Diphenylamine - 122-39-4	122-39-4	< 0.1	1.0
Petroleum distillates, hydrotreated light naphthenic - 64742-53-6	64742-53-6	< 0.1	
4,4'-Methylenebis(2,6-di-tert-butylphenol) - 118-82-1	118-82-1	< 0.1	
Naphta (petroleum) light aromatic - 64742-95-6	64742-95-6	< 0.1	
Phenol - 108-95-2	108-95-2	< 0.1	1.0
Ortho-tert-butylphenol - 88-18-6	88-18-6	< 0.1	

## SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenol 108-95-2	1000 lb	Х	Х	Х

# **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

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Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phenol	1000 lb	1000 lb	RQ 1000 lb final RQ
108-95-2			RQ 454 kg final RQ

# U.S. State Regulations

## **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

## **U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

NFPA	Health hazard 1	Flammability 1	Stability 1	
16. OTHER INFOR	MATION			
Issuing Date	04-24-2012	>		
Revision Date	05-13-2020			
Reason for revision	General Inf	formation.		

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** 



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# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier		
Product Name	6402 MONOLEC®	R&O COMPRESSOR/TURBINE OIL

Other means of identification Synonyms

No information available

#### Recommended use of the chemical and restrictions on use

Identified uses Lubricant

Uses advised against Consumer use

# Details of the supplier of the safety data sheet

Manufacturer Lubrication Engineers Inc. 1919 E. Tulsa Wichita, KS 67216 USA 800-537-7683 Emergency Telephone Number

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

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# 2. HAZARDS IDENTIFICATION

#### Classification

**OSHA Regulatory Status** 

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

		Emergency Ov			
		Signal Wo	ora		
		None			
		Hazard State	ments		
		None			
The	product contains no substa	nces which at their given con	centration, are consid	dered to be hazardous	to health
appearance	red	Physical state	liquid	Odor	Hydrocarbon-like
Precautional	y Statements - Preventior	ı			
None.	,	-			
Response					
None.					
Eyes					
None.					
Skin					
None.					
Inhalation					
None.					
Ingestion					
None.					
Fire					
None.					
Spill					
None.					
Storage					
None.					
Disposal					
None.					
Hazards not	otherwise classified (HNC	)C)			

None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

The producer of "6402" declares that it contains less than 3% DMSO extractable material by IP-346

Environmental Precautions

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4. FIRST AID MEASURES		
First Aid Measures		
General Advice	If symptoms develop move victim to fresh air. Show this safet attendance. Do not breathe dust/fume/gas/mist/vapors/spray.	
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. rinsing.	Keep eye wide open while
Skin Contact	Consult a physician if necessary. Wash off immediately with s removing all contaminated clothes and shoes.	soap and plenty of water while
Inhalation	Move to fresh air. Consult a physician. If not breathing, give a	rtificial respiration.
Ingestion	May cause adverse kidney effects. Drink plenty of water. Do	NOT induce vomiting.
Protection of First-aiders	Use personal protective equipment.	
Most important symptoms and effe	cts, both acute and delayed	
Symptoms	None known.	
Indication of any immediate medica	l attention and special treatment needed	
Notes to Physician	Treat symptomatically.	
5. FIRE-FIGHTING MEASURE	S	
Flash Point	215 °C / 419 °F	
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.
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating gases	and vapors.
<u>Explosion Data</u> Sensitivity to Mechanical Impac Sensitivity to Static Discharge	<b>t</b> Not impact sensitive. May be ignited by friction, heat, sparks or flames.	
Protective Equipment and Precautions for Firefighters	Wear self-contained breathing apparatus and protective suit.	
NFPA Health haz	ard 1 Flammability 1 Stability 1	
6. ACCIDENTAL RELEASE M	EASURES	
Personal precautions, protective ec	uipment and emergency procedures	
Personal Precautions	Do not touch or walk through spilled material. Remove all sou	rces of ignition.

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Issuing Date 04-24-2012	Revision Date 05-13-2020	Revision Number 4.2
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined ar accumulating to form explosive concentrations. Vapors can accu	•
Methods and material for contain	nent and cleaning up	
Methods for Containment	Prevent further leakage or spillage if safe to do so. Absorb spill w sand or earth), then place in a chemical waste container.	vith inert material (e.g. dry
Methods for Cleaning up	Use personal protective equipment. Dam up. Take up mechanic containers for disposal. Clean contaminated surface thoroughly.	ally, placing in appropriate
7. HANDLING AND STORAG	ЭЕ	
Precautions for safe handling		
Advice on safe handling	Avoid contact with skin, eyes and clothing. Wear personal protect vapor buildup by providing adequate ventilation during and after smoke when using this product.	
Conditions for safe storage, inclue	ding any incompatibilities	
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place. I children.	Keep out of the reach of
Incompatible products.	Strong oxidizing agents. Strong acids. Strong bases.	

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
White Mineral Oil 8042-47-5	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Diphenylamine 122-39-4	TWA: 10 mg/m <sup>3</sup>	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Phenol 108-95-2	TWA: 5 ppm S*	TWA: 5 ppm TWA: 19 mg/m <sup>3</sup> (vacated) TWA: 5 ppm (vacated) TWA: 19 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 250 ppm Ceiling: 15.6 ppm Ceiling: 60 mg/m <sup>3</sup> TWA: 5 ppm TWA: 19 mg/m <sup>3</sup>

#### Appropriate engineering controls

Engineering Measures	Showers
	Eyewash stations
	Ventilation systems.

## Individual protection measures, such as personal protective equipment

- **Eye/Face Protection** Eye protection not needed during typical product use conditions. Wear eye protection as appropriate when handling the bulk formulation.
- Skin and Body Protection Long sleeved clothing. Protective gloves.

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Respiratory ProtectionNo protective equipment is needed under normal use conditions. If exposure limits are<br/>exceeded or irritation is experienced, ventilation and evacuation may be required.Hygiene MeasuresHandle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties Physical state appearance Odor Odor threshold	liquid red Hydrocarbon-like No information available
Property	Property
pH Melting Point / Freezing Point Boiling Point/Range Flash Point Upper flammability limit: Lower Flammability Limit Vapor pressure Vapor Density Specific Gravity Water solubility Partition Coefficient: n-octanol/water Autoignition Temperature Decomposition Temperature Viscosity, kinematic	6 - 8 No data available no data available $215 \ ^{\circ}C / 419 \ ^{\circ}F$ No data available No data available No data available < 1 (Air = 1) 0.87 negligible no data available No data available No data available No data available A5.23 cSt @ 40°C

# **10. STABILITY AND REACTIVITY**

reactivity	No information available
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	Heat, flames and sparks. Contact with other chemicals
Incompatible Materials	Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)

# 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information
Inhalation	May cause irritation of respiratory tract.

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Eye Contact	Contact with eyes may cause irritation.		
Skin Contact	May cause irritation.		
Ingestion	There is no data available for this product.		
Component Information			
Information on toxicological effect	cts		
Symptoms	No information available.		
Delayed and immediate effects as	s well as chronic effects from short and long-term exposure		
The producer of "6402" declares that	at it contains less than 3% DMSO extractable material by IP-346		
Sensitization	No information available.		
Mutagenic Effects	No information available.		
Carcinogenicity	No information available.		
Reproductive toxicity	No information available.		
Target Organ Effects	Respiratory system, Eyes, Skin.		
Numerical measures of toxicity	Product Information		
The following values are calculat ATEmix (oral) ATEmix (dermal)	ed based on chapter 3.1 of the GHS document . 15341 mg/kg 6137 mg/kg		
12. ECOLOGICAL INFORM	ATION		
Ecotoxicity	None known		
Persistence and Degradability	No information available.		
<b>Bioaccumulation</b>	No information available.		
<u>Mobility</u>	The product is insoluble and floats on water.		
Other Adverse Effects	No information available		
13. DISPOSAL CONSIDERA	TIONS		
Waste treatment methods			

Waste Disposal Methods

Dispose of in accordance with local regulations.

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#### **Contaminated Packaging**

Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	<b>RCRA - U Series Wastes</b>
Diphenylamine		Included in waste streams:		
122-39-4		F039, K083, K104		
Phenol	U188	Included in waste streams:		
108-95-2		F039, K001, K022, K087		
		Included in waste stream:		
		K060		

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste Status
Diphenylamine	Toxic
122-39-4	
Phenol	Toxic
108-95-2	Corrosive

# **14. TRANSPORT INFORMATION**

DOT

Not regulated

15. REGULATORY	<b>INFORMATION</b>
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International Inventories	
TSCA	Complies
DSL/NDSL	Not determined
NDSL	Not determined
EINECS	Not determined
ELINCS	Not determined
ENCS	Not determined
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

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

## U.S. Federal Regulations

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## <u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0	64742-65-0	90 - 100	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene - 68411-46-1	68411-46-1	0.1 - 1	
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C7-9 125643-61-0	125643-61-0	0.1 - 1	
21151 Proprietary Organsulfur-phosphorus Compounds - 9999-99-9	9999-99-9	0.1 - 1	
20095 Alkyl phenol - 9999-99-9	9999-99-9	0.1 - 1	
White Mineral Oil - 8042-47-5	8042-47-5	< 0.1	
N-1-naphthylaniline - 90-30-2	90-30-2	< 0.1	
Petroleum distillates, hydrotreated middle - 64742-46-7	64742-46-7	< 0.1	
Dilauryl Hydrogen Phosphite - 21302-09-0	21302-09-0	< 0.1	
21271 Long chain alkyl amide - 9999-99-9	9999-99-9	< 0.1	
Methyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate - 6386-38-5	6386-38-5	< 0.1	
Petroleum distillates, hydrotreated heavy naphthenic - 64742-52-5	64742-52-5	< 0.1	
Petroleum distillates, solvent dewaxed light paraffinic - 64742-56-9	64742-56-9	< 0.1	
Petroleum distillates, hydrotreated light - 64742-47-8	64742-47-8	< 0.1	
20095 Alkaryl Triazole - 9999-99-9	9999-99-9	< 0.1	
Methylene Bridged Polyalkyl Phenols - 68610-07-1	68610-07-1	< 0.1	
Diphenylamine - 122-39-4	122-39-4	< 0.1	1.0
Petroleum distillates, hydrotreated light naphthenic - 64742-53-6	64742-53-6	< 0.1	
4,4'-Methylenebis(2,6-di-tert-butylphenol) - 118-82-1	118-82-1	< 0.1	
Naphta (petroleum) light aromatic - 64742-95-6	64742-95-6	< 0.1	
Phenol - 108-95-2	108-95-2	< 0.1	1.0
Ortho-tert-butylphenol - 88-18-6	88-18-6	< 0.1	

## SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenol 108-95-2	1000 lb	Х	Х	Х

# **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

# 6402 MONOLEC® R&O COMPRESSOR/TURBINE OIL

## Issuing Date 04-24-2012

Revision Date 05-13-2020

Revision Number 4.2

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phenol	1000 lb	1000 lb	RQ 1000 lb final RQ
108-95-2			RQ 454 kg final RQ

## U.S. State Regulations

## California Proposition 65

This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

<u>NFPA</u>	Health hazard 1	Flammability 1	Stability 1	
16. OTHER INFOR	MATION			
Issuing Date	04-24-2012			
Revision Date	05-13-2020			
Reason for revision	General Info	General Information.		
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

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



# 6403 MONOLEC® R&O COMPRESSOR/TURBINE OIL

**Issuing Date** 04-24-2012

Revision Date 05-13-2020

Revision Number 4.1

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# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier		
Product Name	6403 MONOLEC®	R&O COMPRESSOR/TURBINE OIL

Other means of identification Synonyms

No information available

#### Recommended use of the chemical and restrictions on use

Identified uses Lubricant

Uses advised against Consumer use

# Details of the supplier of the safety data sheet

Manufacturer Lubrication Engineers Inc. 1919 E. Tulsa Wichita, KS 67216 USA 800-537-7683 Emergency Telephone Number

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

# 6403 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-13-2020

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# 2. HAZARDS IDENTIFICATION

Classification

**OSHA Regulatory Status** 

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

		Emergency O			]
		Signal Wo None	ora		
		None			
		Hazard State	ments		
		None			
The	The product contains no substances which at their given concentration, are considered to be hazardous to health				
appearance	red	Physical state	liquid	Odor	Hydrocarbon-like
Precautional	y Statements - Prevention				
None.					
Response					
None.					
Eyes					
None.					
Skin					
None.					
Inhalation					
None.					
Ingestion					
None.					
Fire					
None.					
Spill					
None.					
Storage					
None.					
Disposal					
None.					
Hazards not	otherwise classified (HNOC)				

None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

The producer of "6403" declares that it contains less than 3% DMSO extractable material by IP-346

# 6403 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-13-2020	Revision Number 4.1			
4. FIRST AID MEASURES					
First Aid Measures					
General Advice	If symptoms develop move victim to fresh air. Show this safety attendance. Do not breathe dust/fume/gas/mist/vapors/spray.	data sheet to the doctor in			
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. K rinsing.	eep eye wide open while			
Skin Contact	Consult a physician if necessary. Wash off immediately with so removing all contaminated clothes and shoes.	ap and plenty of water while			
Inhalation	Move to fresh air. Consult a physician. If not breathing, give art	ificial respiration.			
Ingestion	May cause adverse kidney effects. Drink plenty of water. Do Ne	OT induce vomiting.			
Protection of First-aiders	Use personal protective equipment.				
Most important symptoms and effe	cts, both acute and delayed				
Symptoms	None known.				
Indication of any immediate medica	I attention and special treatment needed				
Notes to Physician	Treat symptomatically.				
5. FIRE-FIGHTING MEASURE	5. FIRE-FIGHTING MEASURES				
Flash Point	223 °C / 433.4 °F				
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.				
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating gases and vapors.				
<u>Explosion Data</u> Sensitivity to Mechanical Impact Not impact sensitive. Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames.					
Protective Equipment and Precautions for Firefighters	Wear self-contained breathing apparatus and protective suit.				
NFPA Health haz	ard 1 Flammability 1 Stability 1				
6. ACCIDENTAL RELEASE M	EASURES				
Personal precautions, protective ec	uipment and emergency procedures				
Personal Precautions	Do not touch or walk through spilled material. Remove all source	ces of ignition.			

# 6403 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-13-2020	Revision Number 4.1
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined accumulating to form explosive concentrations. Vapors can ac	•
Methods and material for contain	ment and cleaning up	
Methods for Containment	Prevent further leakage or spillage if safe to do so. Absorb spi sand or earth), then place in a chemical waste container.	ll with inert material (e.g. dry
Methods for Cleaning up	Use personal protective equipment. Dam up. Take up mechar containers for disposal. Clean contaminated surface thorough	
7. HANDLING AND STORA	GE	
Precautions for safe handling		
Advice on safe handling	Avoid contact with skin, eyes and clothing. Wear personal providing adequate ventilation during and after smoke when using this product.	
Conditions for safe storage, inclu	iding any incompatibilities	
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place children.	e. Keep out of the reach of
Incompatible products.	Strong oxidizing agents. Strong acids. Strong bases.	

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
White Mineral Oil	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup>
8042-47-5		(vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
		. , .	STEL: 10 mg/m <sup>3</sup>
Diphenylamine	TWA: 10 mg/m <sup>3</sup>	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
122-39-4			-
Phenol	TWA: 5 ppm	TWA: 5 ppm	IDLH: 250 ppm
108-95-2	S*	TWA: 19 mg/m <sup>3</sup>	Ceiling: 15.6 ppm
		(vacated) TWA: 5 ppm	Ceiling: 60 mg/m <sup>3</sup>
		(vacated) TWA: 19 mg/m <sup>3</sup>	TWA: 5 ppm
		(vacated) S*	TWA: 19 mg/m <sup>3</sup>
		S*	-

#### Appropriate engineering controls

Engineering Measures	Showers
	Eyewash stations
	Ventilation systems.

## Individual protection measures, such as personal protective equipment

- **Eye/Face Protection** Eye protection not needed during typical product use conditions. Wear eye protection as appropriate when handling the bulk formulation.
- Skin and Body Protection Long sleeved clothing. Protective gloves.

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Respiratory ProtectionNo protective equipment is needed under normal use conditions. If exposure limits are<br/>exceeded or irritation is experienced, ventilation and evacuation may be required.Hygiene MeasuresHandle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1. Information on basic physical and chemical properties liquid Physical state red appearance red Odor Hydro Odor threshold No inf

## Property \_\_\_\_\_

pH Melting Point / Freezing Point Boiling Point/Range Flash Point Upper flammability limit: Lower Flammability Limit Vapor pressure Vapor Density Specific Gravity Water solubility Partition Coefficient: n-octanol/water Autoignition Temperature Decomposition Temperature Viscosity, kinematic

# Hydrocarbon-like No information available

# Property

6 - 8No data available no data available 223 °C / 433.4 °F No data available No data available No data available < 1 (Air = 1) 0.87 negligible no data available No data available No data available No data available 67.60 cSt @ 40°C

# **10. STABILITY AND REACTIVITY**

<u>reactivity</u>	No information available
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	Heat, flames and sparks. Contact with other chemicals
Incompatible Materials	Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)

# 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information
Inhalation	May cause irritation of respiratory tract.

# 6403 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-13-2020	Revision Number 4.1		
Eye Contact	Contact with eyes may cause irritation.			
Skin Contact	May cause irritation.			
Ingestion	There is no data available for this product.			
Component Information				
Information on toxicological effect	ts_			
Symptoms	No information available.			
Delayed and immediate effects as	well as chronic effects from short and long-term exposure			
The producer of "6403" declares that	t it contains less than 3% DMSO extractable material by IP-346			
Sensitization	No information available.			
Mutagenic Effects	No information available.			
Carcinogenicity	No information available.			
Reproductive toxicity	No information available.			
Target Organ Effects	Respiratory system, Eyes, Skin.			
Numerical measures of toxicity -	Product Information			
The following values are calculate ATEmix (oral) ATEmix (dermal)	ed based on chapter 3.1 of the GHS document . 15341 mg/kg 6137 mg/kg			
12. ECOLOGICAL INFORMA	TION			
Ecotoxicity	None known			
Persistence and Degradability	No information available.			
<b>Bioaccumulation</b>	No information available.			
<u>Mobility</u>	The product is insoluble and floats on water.			
Other Adverse Effects	No information available			
13. DISPOSAL CONSIDERA	TIONS			
Waste treatment methods				

Waste Disposal Methods

Dispose of in accordance with local regulations.

# 6403 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-13-2020

Revision Number 4.1

## **Contaminated Packaging**

Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Diphenylamine		Included in waste streams:		
122-39-4		F039, K083, K104		
Phenol	U188	Included in waste streams:		
108-95-2		F039, K001, K022, K087		
		Included in waste stream:		
		K060		

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste Status
Diphenylamine	Toxic
122-39-4	
Phenol	Toxic
108-95-2	Corrosive

# **14. TRANSPORT INFORMATION**

DOT

Not regulated

15. REGULATO	DRY INFORMATION
--------------	-----------------

International Inventories	
TSCA	Complies
DSL/NDSL	Not determined
NDSL	Not determined
EINECS	Not determined
ELINCS	Not determined
ENCS	Not determined
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

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

# U.S. Federal Regulations

# 6403 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-13-2020

Revision Number 4.1

## <u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0	64742-65-0	90 - 100	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene - 68411-46-1	68411-46-1	0.1 - 1	
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C7-9 125643-61-0	125643-61-0	0.1 - 1	
21151 Proprietary Organsulfur-phosphorus Compounds - 9999-99-9	9999-99-9	0.1 - 1	
20095 Alkyl phenol - 9999-99-9	9999-99-9	0.1 - 1	
White Mineral Oil - 8042-47-5	8042-47-5	< 0.1	
N-1-naphthylaniline - 90-30-2	90-30-2	< 0.1	
Petroleum distillates, hydrotreated middle - 64742-46-7	64742-46-7	< 0.1	
Dilauryl Hydrogen Phosphite - 21302-09-0	21302-09-0	< 0.1	
21271 Long chain alkyl amide - 9999-99-9	9999-99-9	< 0.1	
Methyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate - 6386-38-5	6386-38-5	< 0.1	
Petroleum distillates, hydrotreated heavy naphthenic - 64742-52-5	64742-52-5	< 0.1	
Petroleum distillates, solvent dewaxed light paraffinic - 64742-56-9	64742-56-9	< 0.1	
Petroleum distillates, hydrotreated light - 64742-47-8	64742-47-8	< 0.1	
20095 Alkaryl Triazole - 9999-99-9	9999-99-9	< 0.1	
Methylene Bridged Polyalkyl Phenols - 68610-07-1	68610-07-1	< 0.1	
Diphenylamine - 122-39-4	122-39-4	< 0.1	1.0
Petroleum distillates, hydrotreated light naphthenic - 64742-53-6	64742-53-6	< 0.1	
4,4'-Methylenebis(2,6-di-tert-butylphenol) - 118-82-1	118-82-1	< 0.1	
Naphta (petroleum) light aromatic - 64742-95-6	64742-95-6	< 0.1	
Phenol - 108-95-2	108-95-2	< 0.1	1.0
Ortho-tert-butylphenol - 88-18-6	88-18-6	< 0.1	

## SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenol 108-95-2	1000 lb	Х	Х	Х

# **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

# 6403 MONOLEC® R&O COMPRESSOR/TURBINE OIL

## Issuing Date 04-24-2012

Revision Date 05-13-2020

Revision Number 4.1

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phenol	1000 lb	1000 lb	RQ 1000 lb final RQ
108-95-2			RQ 454 kg final RQ

# U.S. State Regulations

## California Proposition 65

This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

NFPA	Health hazard 1	Flammability 1	Stability 1	
16. OTHER INFOR	RMATION			
Issuing Date	04-24-2012			
Revision Date	05-13-2020			
Reason for revision	Formulation	).		
<u>Disclaimer</u>				

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



# 6404 MONOLEC® R&O COMPRESSOR/TURBINE OIL

**Issuing Date** 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

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# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier		
Product Name	6404 MONOLEC®	R&O COMPRESSOR/TURBINE OIL

Other means of identification Synonyms

No information available

## Recommended use of the chemical and restrictions on use

Identified uses Lubricant

Uses advised against Consumer use

# Details of the supplier of the safety data sheet

Manufacturer Lubrication Engineers Inc. 1919 E. Tulsa Wichita, KS 67216 USA 800-537-7683 Emergency Telephone Number

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

# 6404 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

# 2. HAZARDS IDENTIFICATION

Classification

**OSHA Regulatory Status** 

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

r		Emergency Ov	verview		
		Signal Wo	ord		
	None				
		Hazard State	ments		
		None			
The	product contains no substanc	ces which at their given con	centration, are consid	dered to be hazardous	to health
appearance	red	Physical state	liquid	Odor	Hydrocarbon-like
Precautional	y Statements - Prevention				
None.	,				
Response					
None.					
Eyes					
None.					
Skin					
None.					
Inhalation					
None.					
Ingestion					
None.					
Fire					
None.					
Spill					
None.					
Storage					
None.					
Disposal					
None.					
Hazards not	otherwise classified (HNOC	:)			

None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

The producer of "6404" declares that it contains less than 3% DMSO extractable material by IP-346

# 6404 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number 4.1		
4. FIRST AID MEASURES				
First Aid Measures				
General Advice	If symptoms develop move victim to fresh air. Show this safety attendance. Do not breathe dust/fume/gas/mist/vapors/spray.	v data sheet to the doctor in		
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.			
Skin Contact	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.			
Inhalation	Move to fresh air. Consult a physician. If not breathing, give an	tificial respiration.		
Ingestion	May cause adverse kidney effects. Drink plenty of water. Do N	IOT induce vomiting.		
Protection of First-aiders	Use personal protective equipment.			
Most important symptoms and effe	cts, both acute and delayed			
Symptoms	None known.			
Indication of any immediate medica	al attention and special treatment needed			
Notes to Physician	Treat symptomatically.			
5. FIRE-FIGHTING MEASURE	ES			
Flash Point	237 °C / 458.6 °F			
Suitable Extinguishing Media	<u>Media</u> Water spray, Carbon dioxide (CO2), Foam, Dry chemical			
Unsuitable Extinguishing Media	Media Do not use a solid water stream as it may scatter and spread fire.			
Specific Hazards Arising from the Chemical	the Thermal decomposition can lead to release of irritating gases and vapors.			
Explosion Data Sensitivity to Mechanical Impact Not impact sensitive. Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames.				
Protective Equipment and Precautions for Firefighters	Wear self-contained breathing apparatus and protective suit.			
NFPA Health haz	ard 1 Flammability 1 Stability 1			
6. ACCIDENTAL RELEASE N	IEASURES			
Personal precautions, protective e	quipment and emergency procedures			
Personal Precautions	Do not touch or walk through spilled material. Remove all sour	ces of ignition.		

Environmental Precautions

# 6404 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number 4.1
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined an accumulating to form explosive concentrations. Vapors can accu	
Methods and material for containm	nent and cleaning up	
Methods for Containment Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. dr sand or earth), then place in a chemical waste container.		
Methods for Cleaning up	Use personal protective equipment. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.	
7. HANDLING AND STORAG	E	
Precautions for safe handling		
Advice on safe handling	Avoid 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.	
Conditions for safe storage, includ	ling any incompatibilities	
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place. I children.	Keep out of the reach of
Incompatible products.	Strong oxidizing agents. Strong acids. Strong bases.	

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
White Mineral Oil	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup>
8042-47-5		(vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
		. , .	STEL: 10 mg/m <sup>3</sup>
Diphenylamine	TWA: 10 mg/m <sup>3</sup>	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
122-39-4			-
Phenol	TWA: 5 ppm	TWA: 5 ppm	IDLH: 250 ppm
108-95-2	S*	TWA: 19 mg/m <sup>3</sup>	Ceiling: 15.6 ppm
		(vacated) TWA: 5 ppm	Ceiling: 60 mg/m <sup>3</sup>
		(vacated) TWA: 19 mg/m <sup>3</sup>	TWA: 5 ppm
		(vacated) S*	TWA: 19 mg/m <sup>3</sup>
		S*	-

#### Appropriate engineering controls

Engineering Measures	Showers
	Eyewash stations
	Ventilation systems.

## Individual protection measures, such as personal protective equipment

- **Eye/Face Protection** Eye protection not needed during typical product use conditions. Wear eye protection as appropriate when handling the bulk formulation.
- Skin and Body Protection Long sleeved clothing. Protective gloves.

# 6404 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date	04-24-2012
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Revision Date 05-14-2020

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Respiratory ProtectionNo protective equipment is needed under normal use conditions. If exposure limits are<br/>exceeded or irritation is experienced, ventilation and evacuation may be required.Hygiene MeasuresHandle in accordance with good industrial hygiene and safety practice.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1. Information on basic physical and chemical properties Iiquid Physical state red appearance red Odor Hydro Odor threshold No inf

## Property \_\_\_\_\_

pH Melting Point / Freezing Point Boiling Point/Range Flash Point Upper flammability limit: Lower Flammability Limit Vapor pressure Vapor Density Specific Gravity Water solubility Partition Coefficient: n-octanol/water Autoignition Temperature Decomposition Temperature Viscosity, kinematic red Hydrocarbon-like No information available

# Property

6 - 8No data available no data available 237 °C / 458.6 °F No data available No data available No data available < 1 (Air = 1) 0.88 negligible no data available No data available No data available No data available 98.27 cSt @ 40°C

# **10. STABILITY AND REACTIVITY**

reactivity	No information available
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	Heat, flames and sparks. Contact with other chemicals
Incompatible Materials	Strong oxidizing agents. Strong acids. Strong bases.
Possibility of Hazardous Reactions	None under normal processing. Heat, flames and sparks. Contact with other chemicals

Hazardous Decomposition Products Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)

# 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information
Inhalation	May cause irritation of respiratory tract.

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Eye Contact	Contact with eyes may cause irritation.	
Skin Contact	May cause irritation.	
Ingestion	There is no data available for this product.	
Component Information		
Information on toxicological effect	ts	
Symptoms	No information available.	
Delayed and immediate effects as	well as chronic effects from short and long-term exposure	
The producer of "6404" declares that	t it contains less than 3% DMSO extractable material by IP-346	
Sensitization	No information available.	
Mutagenic Effects	No information available.	
Carcinogenicity	No information available.	
Reproductive toxicity	No information available.	
Target Organ Effects	Respiratory system, Eyes, Skin.	
Numerical measures of toxicity -	Product Information	
The following values are calculate ATEmix (oral) ATEmix (dermal)	ed based on chapter 3.1 of the GHS document . 15366 mg/kg 6148 mg/kg	
12. ECOLOGICAL INFORMA	ATION	
<u>Ecotoxicity</u>	None known	
Persistence and Degradability	No information available.	
<b>Bioaccumulation</b>	No information available.	
<u>Mobility</u>	The product is insoluble and floats on water.	
Other Adverse Effects	No information available	
13. DISPOSAL CONSIDERA	TIONS	
Waste treatment methods		

Waste Disposal Methods

Dispose of in accordance with local regulations.

# 6404 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

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## **Contaminated Packaging**

Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Diphenylamine		Included in waste streams:		
122-39-4		F039, K083, K104		
Phenol	U188	Included in waste streams:		
108-95-2		F039, K001, K022, K087		
		Included in waste stream:		
		K060		

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste Status
Diphenylamine	Toxic
122-39-4	
Phenol	Toxic
108-95-2	Corrosive

# **14. TRANSPORT INFORMATION**

DOT

Not regulated

15. REGULATO	DRY INFORMATION
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International Inventories	
TSCA	Complies
DSL/NDSL	Not determined
NDSL	Not determined
EINECS	Not determined
ELINCS	Not determined
ENCS	Not determined
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**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

## U.S. Federal Regulations

# 6404 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

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## <u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0	64742-65-0	90 - 100	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene - 68411-46-1	68411-46-1	0.1 - 1	
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C7-9 125643-61-0	125643-61-0	0.1 - 1	
21151 Proprietary Organsulfur-phosphorus Compounds - 9999-99-9	9999-99-9	0.1 - 1	
20095 Alkyl phenol - 9999-99-9	9999-99-9	0.1 - 1	
White Mineral Oil - 8042-47-5	8042-47-5	< 0.1	
N-1-naphthylaniline - 90-30-2	90-30-2	< 0.1	
Petroleum distillates, hydrotreated middle - 64742-46-7	64742-46-7	< 0.1	
Dilauryl Hydrogen Phosphite - 21302-09-0	21302-09-0	< 0.1	
21271 Long chain alkyl amide - 9999-99-9	9999-99-9	< 0.1	
Methyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate - 6386-38-5	6386-38-5	< 0.1	
Petroleum distillates, hydrotreated heavy naphthenic - 64742-52-5	64742-52-5	< 0.1	
Petroleum distillates, solvent dewaxed light paraffinic - 64742-56-9	64742-56-9	< 0.1	
Petroleum distillates, hydrotreated light - 64742-47-8	64742-47-8	< 0.1	
20095 Alkaryl Triazole - 9999-99-9	9999-99-9	< 0.1	
Methylene Bridged Polyalkyl Phenols - 68610-07-1	68610-07-1	< 0.1	
Diphenylamine - 122-39-4	122-39-4	< 0.1	1.0
Petroleum distillates, hydrotreated light naphthenic - 64742-53-6	64742-53-6	< 0.1	
4,4'-Methylenebis(2,6-di-tert-butylphenol) - 118-82-1	118-82-1	< 0.1	
Naphta (petroleum) light aromatic - 64742-95-6	64742-95-6	< 0.1	
Phenol - 108-95-2	108-95-2	< 0.1	1.0
Ortho-tert-butylphenol - 88-18-6	88-18-6	< 0.1	

## SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenol 108-95-2	1000 lb	Х	Х	Х

# **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

# 6404 MONOLEC® R&O COMPRESSOR/TURBINE OIL

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Revision Number 4.1

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phenol	1000 lb	1000 lb	RQ 1000 lb final RQ
108-95-2			RQ 454 kg final RQ

# U.S. State Regulations

## California Proposition 65

This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

with any other materials or in any process, unless specified in the text.

<u>NFPA</u>	Health hazard 1	Flammability 1	Stability 1	
16. OTHER INFOR	MATION			
Issuing Date	04-24-2012			
Revision Date	05-14-2020			
Reason for revision	General Info	ormation.		
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 designated and may not be valid for such material used in combination

SDS is available at www.LElubricants.com

End of Safety Data Sheet



## 6405 MONOLEC® R&O COMPRESSOR/TURBINE OIL

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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier		
Product Name	6405 MONOLEC®	R&O COMPRESSOR/TURBINE OIL

Other means of identification Synonyms

No information available

### Recommended use of the chemical and restrictions on use

Identified uses Lubricant

Uses advised against Consumer use

### Details of the supplier of the safety data sheet

Manufacturer Lubrication Engineers Inc. 1919 E. Tulsa Wichita, KS 67216 USA 800-537-7683 Emergency Telephone Number

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

# 6405 MONOLEC® R&O COMPRESSOR/TURBINE OIL

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## 2. HAZARDS IDENTIFICATION

Classification

**OSHA Regulatory Status** 

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

		Emergency O			]
		Signal Wo None	ora		
		None			
		Hazard State	ments		
		None			
The	product contains no substances which	at their given con	centration, are considered to be haz	ardous	to health
appearance	red	Physical state	liquid	Odor	Hydrocarbon-like
Precautional	y Statements - Prevention				
None.					
Response					
None.					
Eyes					
None.					
Skin					
None.					
Inhalation					
None.					
Ingestion					
None.					
Fire					
None.					
Spill					
None.					
Storage					
None.					
Disposal					
None.					
Hazards not	otherwise classified (HNOC)				

None

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

The producer of "6405" declares that it contains less than 3% DMSO extractable material by IP-346

# 6405 MONOLEC® R&O COMPRESSOR/TURBINE OIL

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4. FIRST AID MEASURES				
First Aid Measures				
General Advice	If symptoms develop move victim to fresh air. Show this safe attendance. Do not breathe dust/fume/gas/mist/vapors/spray			
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. rinsing. Call a physician if irritation persists.	Keep eye wide open while		
Skin Contact	Consult a physician if necessary. Wash off immediately with removing all contaminated clothes and shoes.	soap and plenty of water while		
Inhalation	Move to fresh air. If symptoms persist, call a physician.			
Ingestion	Drink plenty of water. Do NOT induce vomiting. Never give a unconscious person. Consult a physician.	nything by mouth to an		
Protection of First-aiders	Use personal protective equipment.			
Most important symptoms and effe	cts, both acute and delayed			
Symptoms	None known.			
Indication of any immediate medica	I attention and special treatment needed			
Notes to Physician	Treat symptomatically.			
5. FIRE-FIGHTING MEASURE	S			
Flash Point	246 °C / 474.8 °F			
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	l fire.		
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating gases	s and vapors.		
Explosion Data Sensitivity to Mechanical Impact Not impact sensitive. Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames.				
Protective Equipment and Precautions for Firefighters	Wear self-contained breathing apparatus and protective suit.			
NFPA Health haz	ard 1 Flammability 1 Stability 1			
6. ACCIDENTAL RELEASE M	EASURES			

### Personal precautions, protective equipment and emergency procedures

Personal Precautions

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

# 6405 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number 4.1	
Environmental Precautions			
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined are accumulating to form explosive concentrations. Vapors can accur	•	
Methods and material for containm	ent and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so. Absorb spill was and or earth), then place in a chemical waste container.	ith inert material (e.g. dry	
Methods for Cleaning up	Use personal protective equipment. Dam up. Take up mechanica containers for disposal. Clean contaminated surface thoroughly.	lly, placing in appropriate	
7. HANDLING AND STORAG	E		
Precautions for safe handling			
Advice on safe handling	Avoid contact with skin, eyes and clothing. Wear personal protect vapor buildup by providing adequate ventilation during and after u smoke when using this product.		
Conditions for safe storage, including any incompatibilities			
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place. K children.	eep out of the reach of	
Incompatible products.	Strong oxidizing agents. Strong acids. Strong bases.		

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
White Mineral Oil 8042-47-5	TWA: 5 mg/m³	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m³ TWA: 5 mg/m³ STEL: 10 mg/m³
Diphenylamine 122-39-4	TWA: 10 mg/m <sup>3</sup>	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Phenol 108-95-2	TWA: 5 ppm S*	TWA: 5 ppm TWA: 19 mg/m <sup>3</sup> (vacated) TWA: 5 ppm (vacated) TWA: 19 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 250 ppm Ceiling: 15.6 ppm Ceiling: 60 mg/m <sup>3</sup> TWA: 5 ppm TWA: 19 mg/m <sup>3</sup>

### Appropriate engineering controls

En	aine	erina	Measures
	J	, e	mououroo

Showers Eyewash stations Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Eye protection not needed during typical product use conditions. Wear eye protection as appropriate when handling the bulk formulation.

## 6405 MONOLEC® R&O **COMPRESSOR/TURBINE OIL**

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Skin and Body Protection	Long sleeved clothing. Protective gloves.		
Respiratory Protection	No protective equipment is needed under normal use conditions. exceeded or irritation is experienced, ventilation and evacuation n		
Hygiene Measures	Handle in accordance with good industrial hygiene and safety pra	ctice.	

## 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties Physical state appearance Odor Odor threshold	liquid red Hydrocarbon-like No information available
Property	Property
pH Melting Point / Freezing Point Boiling Point/Range Flash Point Upper flammability limit: Lower Flammability Limit Vapor pressure Vapor Density Specific Gravity Water solubility Partition Coefficient: n-octanol/water Autoignition Temperature Decomposition Temperature	6 - 8 No data available no data available $246 \ ^{\circ}C \ / \ 474.8 \ ^{\circ}F$ No data available No data available No data available < 1 (Air = 1) 0.881 negligible no data available No data available No data available No data available
•	No data available 150.1 cSt @ 40°C

## **10. STABILITY AND REACTIVITY**

reactivity	No information available
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	Heat, flames and sparks. Contact with other chemicals
Incompatible Materials	Strong oxidizing agents. Strong acids. Strong bases.
Hazardous Decomposition Products	<u>s</u> Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)

## **11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information
Inhalation	May cause irritation of respiratory tract.

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Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number 4
Eye Contact	Contact with eyes may cause irritation.	
Skin Contact	May cause irritation.	
Ingestion	There is no data available for this product.	
Component Information		
Information on toxicological effect	ts_	
Symptoms	No information available.	
Delayed and immediate effects as	well as chronic effects from short and long-term exposure	
The producer of "6405" declares that	t it contains less than 3% DMSO extractable material by IP-346	
Sensitization	No information available.	
Mutagenic Effects	No information available.	
Carcinogenicity	No information available.	
Reproductive toxicity	No information available.	
Target Organ Effects	Respiratory system, Eyes, Skin.	
Numerical measures of toxicity -	Product Information	
	d based on chapter 3.1 of the GHS document .	
ATEmix (oral) ATEmix (dermal)	12703 mg/kg 5082 mg/kg	
12. ECOLOGICAL INFORMA	TION	
Ecotoxicity		
Persistence and Degradability	No information available.	
	No information available.	
Persistence and Degradability	No information available. The product is insoluble and floats on water.	

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

4.1

SDS: 6405

## 6405 MONOLEC® R&O COMPRESSOR/TURBINE OIL

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Waste Disposal Methods

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.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Diphenylamine		Included in waste streams:		
122-39-4		F039, K083, K104		
Phenol	U188	Included in waste streams:		
108-95-2		F039, K001, K022, K087		
		Included in waste stream:		
		K060		

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste Status
Diphenylamine	Toxic
122-39-4	
Phenol	Toxic
108-95-2	Corrosive

## **14. TRANSPORT INFORMATION**

DOT

Not regulated

International Inventories	
TSCA	Complies
DSL/NDSL	Not determined
NDSL	Not determined
EINECS	Not determined
ELINCS	Not determined
ENCS	Not determined
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

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

# 6405 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-14-2020

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### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0	64742-65-0	80 - 90	
Residual oils (petroleum), solvent dewaxed - 64742-62-7	64742-62-7	10 - 20	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene - 68411-46-1	68411-46-1	0.1 - 1	
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C7-9 125643-61-0	125643-61-0	0.1 - 1	
21151 Proprietary Organsulfur-phosphorus Compounds - 9999-99-9	9999-99-9	0.1 - 1	
20095 Alkyl phenol - 9999-99-9	9999-99-9	0.1 - 1	
White Mineral Oil - 8042-47-5	8042-47-5	< 0.1	
N-1-naphthylaniline - 90-30-2	90-30-2	< 0.1	
Petroleum distillates, hydrotreated middle - 64742-46-7	64742-46-7	< 0.1	
Petroleum distillates, solvent dewaxed light paraffinic - 64742-56-9	64742-56-9	< 0.1	
Dilauryl Hydrogen Phosphite - 21302-09-0	21302-09-0	< 0.1	
21271 Long chain alkyl amide - 9999-99-9	9999-99-9	< 0.1	
Methyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate - 6386-38-5	6386-38-5	< 0.1	
Petroleum distillates, hydrotreated heavy naphthenic - 64742-52-5	64742-52-5	< 0.1	
Petroleum distillates, hydrotreated light - 64742-47-8	64742-47-8	< 0.1	
20095 Alkaryl Triazole - 9999-99-9	9999-99-9	< 0.1	
Methylene Bridged Polyalkyl Phenols - 68610-07-1	68610-07-1	< 0.1	
Diphenylamine - 122-39-4	122-39-4	< 0.1	1.0
Petroleum distillates, hydrotreated light naphthenic - 64742-53-6	64742-53-6	< 0.1	
4,4'-Methylenebis(2,6-di-tert-butylphenol) - 118-82-1	118-82-1	< 0.1	
Naphta (petroleum) light aromatic - 64742-95-6	64742-95-6	< 0.1	
Phenol - 108-95-2	108-95-2	< 0.1	1.0
Ortho-tert-butylphenol - 88-18-6	88-18-6	< 0.1	

### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

### Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenol 108-95-2	1000 lb	Х	X	Х

## 6405 MONOLEC® R&O COMPRESSOR/TURBINE OIL

### Issuing Date 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phenol	1000 lb	1000 lb	RQ 1000 lb final RQ
108-95-2			RQ 454 kg final RQ

## U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

<u>NFPA</u>	Health hazard 1	Flammability 1	Stability 1	
16. OTHER INFORM	ATION			
Issuing Date	04-24-2012			
Revision Date	05-14-2020			
Reason for revision Disclaimer	General Infor	mation.		

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** 



## 6406 MONOLEC® R&O COMPRESSOR/TURBINE OIL

**Issuing Date** 04-24-2012

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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier		
Product Name	6406 MONOLEC®	R&O COMPRESSOR/TURBINE OIL

Other means of identification Synonyms

No information available

### Recommended use of the chemical and restrictions on use

Identified uses Lubricant

Uses advised against Consumer use

### Details of the supplier of the safety data sheet

Manufacturer Lubrication Engineers Inc. 1919 E. Tulsa Wichita, KS 67216 USA 800-537-7683 Emergency Telephone Number

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

# 6406 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

## 2. HAZARDS IDENTIFICATION

#### **Classification**

**OSHA Regulatory Status** 

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

		Emergency Ov Signal Wo None			
		Hazard Stater None	nents		
The	product contains no subst	ances which at their given con	centration, are consic	lered to be hazardous	to health
appearance	red	Physical state	liquid	Odor	Hydrocarbon-like
Precautiona	y Statements - Preventio	on			
None.					
Response					
None.					
<b>Eyes</b> None.					
Skin					
None.					
Inhalation					
None.					
Ingestion					
None.					
Fire					
None.					
Spill					
None.					
Storage					
None.					
Disposal None.					
	otherwise classified (HN	IOC)			

None

· May be harmful in contact with skin

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

The producer of "6406" declares that it contains less than 3% DMSO extractable material by IP-346

# 6406 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Revision Number 4.1 Issuing Date 04-24-2012 Revision Date 05-14-2020 4. FIRST AID MEASURES **First Aid Measures General Advice** If symptoms develop move victim to fresh air. Show this safety data sheet to the doctor in attendance. Do not breathe dust/fume/gas/mist/vapors/spray. **Eve Contact** Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Call a physician if irritation persists. Consult a physician if necessary. Wash off immediately with soap and plenty of water while **Skin Contact** removing all contaminated clothes and shoes. Inhalation Move to fresh air. If symptoms persist, call a physician. Ingestion Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician. **Protection of First-aiders** Use personal protective equipment. Most important symptoms and effects, both acute and delayed None known. Symptoms Indication of any immediate medical attention and special treatment needed Notes to Physician Treat symptomatically. 5. FIRE-FIGHTING MEASURES Flash Point 244 °C / 471.2 °F Water spray, Carbon dioxide (CO2), Foam, Dry chemical Suitable Extinguishing Media **Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire. Specific Hazards Arising from the Thermal decomposition can lead to release of irritating gases and vapors. Chemical Explosion Data Sensitivity to Mechanical Impact Not impact sensitive. Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames. Wear self-contained breathing apparatus and protective suit. Protective Equipment and Precautions for Firefighters NFPA Health hazard 1 Flammability 1 Stability 1 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

**Personal Precautions** 

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

# 6406 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number 4.1
Environmental Precautions		
Environmental Frecautions		
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined are accumulating to form explosive concentrations. Vapors can accum	
Methods and material for containn	nent and cleaning up	
Methods for Containment	Prevent further leakage or spillage if safe to do so. Absorb spill wi sand or earth), then place in a chemical waste container.	th inert material (e.g. dry
Methods for Cleaning up	Use personal protective equipment. Dam up. Take up mechanical containers for disposal. Clean contaminated surface thoroughly.	ly, placing in appropriate
7. HANDLING AND STORAG	E	
Precautions for safe handling		
Advice on safe handling	Avoid contact with skin, eyes and clothing. Wear personal protect vapor buildup by providing adequate ventilation during and after u smoke when using this product.	
Conditions for safe storage, inclue	ling any incompatibilities	
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place. Ke children.	eep out of the reach of
Incompatible products.	Strong oxidizing agents. Strong acids. Strong bases.	

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
White Mineral Oil 8042-47-5	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Diphenylamine 122-39-4	TWA: 10 mg/m <sup>3</sup>	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Phenol 108-95-2	TWA: 5 ppm S*	TWA: 5 ppm TWA: 19 mg/m <sup>3</sup> (vacated) TWA: 5 ppm (vacated) TWA: 19 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 250 ppm Ceiling: 15.6 ppm Ceiling: 60 mg/m <sup>3</sup> TWA: 5 ppm TWA: 19 mg/m <sup>3</sup>

#### Appropriate engineering controls

**Engineering Measures** 

Showers Eyewash stations Ventilation systems.

#### Individual protection measures, such as personal protective equipment

Eye/Face Protection

Eye protection not needed during typical product use conditions. Wear eye protection as appropriate when handling the bulk formulation.

## 6406 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number	4.1
Skin and Body Protection	Long sleeved clothing. Protective gloves.		
Respiratory Protection	No protective equipment is needed under normal use conditions. exceeded or irritation is experienced, ventilation and evacuation r		

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical state	liquid		
appearance	red		
Odor	Hydrocarbon-like		
Odor threshold	No information available		
Property	<b>Property</b>		
рН	6 - 8		
Melting Point / Freezing Point	No data available		
Boiling Point/Range	no data available		
Flash Point	244 °C / 471.2 °F		
Upper flammability limit:	No data available		
Lower Flammability Limit	No data available		
Vapor pressure	No data available		
Vapor Density	< 1(Air = 1)		
Specific Gravity	0.885		
Water solubility	negligible		
Partition Coefficient: n-octanol/water	no data available		
Autoignition Temperature	No data available		
Decomposition Temperature	No data available		
Viscosity, kinematic	225.6 cSt @ 40°C		

## **10. STABILITY AND REACTIVITY**

reactivity	No information available
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	Heat, flames and sparks. Contact with other chemicals
Incompatible Materials	Strong oxidizing agents. Strong acids. Strong bases.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)

## **11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

**Product Information** 

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

# 6406 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number	4.1	
Inhalation	May cause irritation of respiratory tract.			
Eye Contact	Contact with eyes may cause irritation.			
Skin Contact	May cause irritation.	May cause irritation.		
Ingestion	There is no data available for this product.			
Component Information				
Information on toxicological effect	<u>'S</u>			
Symptoms	No information available.			
Delayed and immediate effects as	well as chronic effects from short and long-term exposure			
The producer of "6406" declares that	it contains less than 3% DMSO extractable material by IP-346			
Sensitization	No information available.			
Mutagenic Effects	No information available.			
Carcinogenicity	No information available.			
Reproductive toxicity	No information available.			
Target Organ Effects	Respiratory system, Eyes, Skin.			
Numerical measures of toxicity -	Product Information			
The following values are calculate ATEmix (oral) ATEmix (dermal)	d based on chapter 3.1 of the GHS document . 8293 mg/kg 3317 mg/kg			
12. ECOLOGICAL INFORMA	TION			
Ecotoxicity				
Persistence and Degradability	No information available.			
<b>Bioaccumulation</b>	No information available.			
<u>Mobility</u>	The product is insoluble and floats on water.			
Other Adverse Effects	No information available			

## **13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

## 6406 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number 4.1

### Waste Disposal Methods

Contaminated Packaging

Dispose of in accordance with local regulations.

Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Diphenylamine		Included in waste streams:		
122-39-4		F039, K083, K104		
Phenol	U188	Included in waste streams:		
108-95-2		F039, K001, K022, K087		
		Included in waste stream:		
		K060		

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste Status
Diphenylamine	Toxic
122-39-4	
Phenol	Toxic
108-95-2	Corrosive

## 14. TRANSPORT INFORMATION

DOT

Not regulated

## **15. REGULATORY INFORMATION**

International Inventories	
TSCA	Complies
DSL/NDSL	Not determined
NDSL	Not determined
EINECS	Not determined
ELINCS	Not determined
ENCS	Not determined
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**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

# 6406 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0	64742-65-0	50 - 60	
Residual oils (petroleum), solvent dewaxed - 64742-62-7	64742-62-7	40 - 50	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene - 68411-46-1	68411-46-1	0.1 - 1	
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C7-9 125643-61-0	125643-61-0	0.1 - 1	
21151 Proprietary Organsulfur-phosphorus Compounds - 9999-99-9	9999-99-9	0.1 - 1	
20095 Alkyl phenol - 9999-99-9	9999-99-9	0.1 - 1	
White Mineral Oil - 8042-47-5	8042-47-5	< 0.1	
N-1-naphthylaniline - 90-30-2	90-30-2	< 0.1	
Petroleum distillates, hydrotreated middle - 64742-46-7	64742-46-7	< 0.1	
Petroleum distillates, solvent dewaxed light paraffinic - 64742-56-9	64742-56-9	< 0.1	
Dilauryl Hydrogen Phosphite - 21302-09-0	21302-09-0	< 0.1	
21271 Long chain alkyl amide - 9999-99-9	9999-99-9	< 0.1	
Methyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate - 6386-38-5	6386-38-5	< 0.1	
Petroleum distillates, hydrotreated heavy naphthenic - 64742-52-5	64742-52-5	< 0.1	
Petroleum distillates, hydrotreated light - 64742-47-8	64742-47-8	< 0.1	
20095 Alkaryl Triazole - 9999-99-9	9999-99-9	< 0.1	
Methylene Bridged Polyalkyl Phenols - 68610-07-1	68610-07-1	< 0.1	
Diphenylamine - 122-39-4	122-39-4	< 0.1	1.0
Petroleum distillates, hydrotreated light naphthenic - 64742-53-6	64742-53-6	< 0.1	
4,4'-Methylenebis(2,6-di-tert-butylphenol) - 118-82-1	118-82-1	< 0.1	
Naphta (petroleum) light aromatic - 64742-95-6	64742-95-6	< 0.1	
Phenol - 108-95-2	108-95-2	< 0.1	1.0
Ortho-tert-butylphenol - 88-18-6	88-18-6	< 0.1	

### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

### Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenol	1000 lb	Х	Х	Х
108-95-2				

## 6406 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phenol	1000 lb	1000 lb	RQ 1000 lb final RQ
108-95-2			RQ 454 kg final RQ

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

<u>NFPA</u>	Health hazard 1	Flammability 1	Stability 1
16. OTHER INFOR	MATION		
Issuing Date	04-24-2012		
Revision Date	05-14-2020		
Reason for revision	General Info	ormation.	
Disclaimer			
The information provi	ded in this Meterial Cofety	Data Chastis same	the the best of our lynewiledge, information and balief

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** 



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## SAFETY DATA SHEET

OIL

**SDS:** 6407

## 6407 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier		
Product Name	6407 MONOLEC®	R&O COMPRESSOR/TURBINE

Other means of identification Synonyms

No information available

### Recommended use of the chemical and restrictions on use

Identified uses Lubricant

Uses advised against Consumer use

### Details of the supplier of the safety data sheet

Manufacturer Lubrication Engineers Inc. 1919 E. Tulsa Wichita, KS 67216 USA 800-537-7683 Emergency Telephone Number

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

## 6407 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

## 2. HAZARDS IDENTIFICATION

**Classification** 

**OSHA Regulatory Status** 

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Label Elements

		Emergency Ov	erview		
		Signal Wo None	ra		
		None			
		Hazard Staten	nents		
		None			
The	product contains no substance	es which at their given con	centration, are conside	red to be hazardous	to health
appearance	red	Physical state	liquid	Odor	Hydrocarbon-like
Precautional	y Statements - Prevention				
None.	y otatements - I revention				
Response					
None.					
Eyes					
None.					
Skin					
None.					
Inhalation					
None.					
Ingestion					
None.					
Fire					
None.					
Spill					
None.					
Storage					
None.					
Disposal					
None.					
Hazards not	otherwise classified (HNOC)	<u>)                                    </u>			

None

· May be harmful in contact with skin

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

The producer of "6407" declares that it contains less than 3% DMSO extractable material by IP-346

# 6407 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Revision Number 4.1 Issuing Date 04-24-2012 Revision Date 05-14-2020 4. FIRST AID MEASURES **First Aid Measures General Advice** If symptoms develop move victim to fresh air. Show this safety data sheet to the doctor in attendance. Do not breathe dust/fume/gas/mist/vapors/spray. **Eve Contact** Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Call a physician if irritation persists. Consult a physician if necessary. Wash off immediately with soap and plenty of water while **Skin Contact** removing all contaminated clothes and shoes. Inhalation Move to fresh air. If symptoms persist, call a physician. Ingestion Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician. **Protection of First-aiders** Use personal protective equipment. Most important symptoms and effects, both acute and delayed None known. Symptoms Indication of any immediate medical attention and special treatment needed Notes to Physician Treat symptomatically. 5. FIRE-FIGHTING MEASURES Flash Point 246 °C / 474.8 °F Water spray, Carbon dioxide (CO2), Foam, Dry chemical Suitable Extinguishing Media **Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire. Specific Hazards Arising from the Thermal decomposition can lead to release of irritating gases and vapors. Chemical Explosion Data Sensitivity to Mechanical Impact Not impact sensitive. Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames. Wear self-contained breathing apparatus and protective suit. Protective Equipment and Precautions for Firefighters NFPA Health hazard 1 Flammability 1 Stability 1 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** 

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

# 6407 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number 4.1	
Environmental Precautions			
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined a accumulating to form explosive concentrations. Vapors can acc		
Methods and material for containm	nent and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so. Absorb spill sand or earth), then place in a chemical waste container.	with inert material (e.g. dry	
Methods for Cleaning up	Use personal protective equipment. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.		
7. HANDLING AND STORAG	E		
Precautions for safe handling			
Advice on safe handling	Avoid contact with skin, eyes and clothing. Wear personal prote vapor buildup by providing adequate ventilation during and after smoke when using this product.		
Conditions for safe storage, includ	ing any incompatibilities		
Technical measures/Storage conditions	Keep container tightly closed in a dry and well-ventilated place. children.	Keep out of the reach of	
Incompatible products.	Strong oxidizing agents. Strong acids. Strong bases.		

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
White Mineral Oil 8042-47-5	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Diphenylamine 122-39-4	TWA: 10 mg/m <sup>3</sup>	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Phenol 108-95-2	TWA: 5 ppm S*	TWA: 5 ppm TWA: 19 mg/m <sup>3</sup> (vacated) TWA: 5 ppm (vacated) TWA: 19 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 250 ppm Ceiling: 15.6 ppm Ceiling: 60 mg/m <sup>3</sup> TWA: 5 ppm TWA: 19 mg/m <sup>3</sup>

#### Appropriate engineering controls

**Engineering Measures** 

Showers Eyewash stations Ventilation systems.

#### Individual protection measures, such as personal protective equipment

Eye/Face Protection

Eye protection not needed during typical product use conditions. Wear eye protection as appropriate when handling the bulk formulation.

## 6407 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number	4.1
Skin and Body Protection	Long sleeved clothing. Protective gloves.		
Respiratory Protection	No protective equipment is needed under normal use conditions. exceeded or irritation is experienced, ventilation and evacuation matrix		

**Hygiene Measures** 

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on basic physical and chemical properties

Physical state	liquid	
appearance	red	
Odor	Hydrocarbon-like	
Odor threshold	No information available	
Property	Property	
рН	6 - 8	
Melting Point / Freezing Point	No data available	
Boiling Point/Range	no data available	
Flash Point	246 °C / 474.8 °F	
Upper flammability limit:	No data available	
Lower Flammability Limit	No data available	
Vapor pressure	No data available	
Vapor Density	< 1(Air = 1)	
Specific Gravity	0.888	
Water solubility	negligible	
Partition Coefficient: n-octanol/water	no data available	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Viscosity, kinematic	325.7 cSt @ 40°C	

## **10. STABILITY AND REACTIVITY**

reactivity	No information available
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	Heat, flames and sparks. Contact with other chemicals
Incompatible Materials	Strong oxidizing agents. Strong acids. Strong bases.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke)

## **11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

**Product Information** 

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

# 6407 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Revision Number	4.1		
Inhalation	May cause irritation of respiratory tract.				
Eye Contact	Contact with eyes may cause irritation.				
Skin Contact	May cause irritation.				
Ingestion	There is no data available for this product.				
Component Information					
Information on toxicological effect	is				
Symptoms	No information available.				
Delayed and immediate effects as	well as chronic effects from short and long-term exposure				
The producer of "6407" declares that	it contains less than 3% DMSO extractable material by IP-346				
Sensitization	No information available.				
Mutagenic Effects	No information available.				
Carcinogenicity	No information available.				
Reproductive toxicity	No information available.				
Target Organ Effects	Respiratory system, Eyes, Skin.				
Numerical measures of toxicity -	Product Information				
The following values are calculate ATEmix (oral) ATEmix (dermal)	d based on chapter 3.1 of the GHS document . 6359 mg/kg 2544 mg/kg				
12. ECOLOGICAL INFORMA	TION				
<u>Ecotoxicity</u>					
Persistence and Degradability	No information available.				
<b>Bioaccumulation</b>					
Mobility	The product is insoluble and floats on water.				
Other Adverse Effects	No information available				

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

## 6407 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012	Revision Date 05-14-2020	Re

Revision Number 4.1

#### Waste Disposal Methods

**Contaminated Packaging** 

Dispose of in accordance with local regulations.

Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Diphenylamine		Included in waste streams:		
122-39-4		F039, K083, K104		
Phenol	U188	Included in waste streams:		
108-95-2		F039, K001, K022, K087		
		Included in waste stream:		
		K060		

This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste Status
Diphenylamine	Toxic
122-39-4	
Phenol	Toxic
108-95-2	Corrosive

## 14. TRANSPORT INFORMATION

DOT

Not regulated

## **15. REGULATORY INFORMATION**

International Inventories				
TSCA	Complies			
DSL/NDSL	Not determined			
NDSL	Not determined			
EINECS	Not determined			
ELINCS	Not determined			
ENCS	Not determined			
IECSC	Complies			
KECL	Complies			
PICCS	Complies			
AICS	Complies			

**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

# 6407 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

### U.S. Federal Regulations

#### <u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Residual oils (petroleum), solvent dewaxed - 64742-62-7	64742-62-7	60 - 70	
Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0	64742-65-0	20 - 30	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene - 68411-46-1	68411-46-1	0.1 - 1	
21151 Proprietary Organsulfur-phosphorus Compounds - 9999-99-9	9999-99-9	0.1 - 1	
20095 Alkyl phenol - 9999-99-9	9999-99-9	0.1 - 1	
Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, C7-9 125643-61-0	125643-61-0	0.1 - 1	
White Mineral Oil - 8042-47-5	8042-47-5	< 0.1	
N-1-naphthylaniline - 90-30-2	90-30-2	< 0.1	
Petroleum distillates, solvent dewaxed light paraffinic - 64742-56-9	64742-56-9	< 0.1	
Petroleum distillates, hydrotreated middle - 64742-46-7	64742-46-7	< 0.1	
Dilauryl Hydrogen Phosphite - 21302-09-0	21302-09-0	< 0.1	
21271 Long chain alkyl amide - 9999-99-9	9999-99-9	< 0.1	
Petroleum distillates, hydrotreated heavy naphthenic - 64742-52-5	64742-52-5	< 0.1	
Petroleum distillates, hydrotreated light - 64742-47-8	64742-47-8	< 0.1	
20095 Alkaryl Triazole - 9999-99-9	9999-99-9	< 0.1	
Methylene Bridged Polyalkyl Phenols - 68610-07-1	68610-07-1	< 0.1	
Diphenylamine - 122-39-4	122-39-4	< 0.1	1.0
Petroleum distillates, hydrotreated light naphthenic - 64742-53-6	64742-53-6	< 0.1	
Methyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate - 6386-38-5	6386-38-5	< 0.1	
4,4'-Methylenebis(2,6-di-tert-butylphenol) - 118-82-1	118-82-1	< 0.1	
Naphta (petroleum) light aromatic - 64742-95-6	64742-95-6	< 0.1	
Phenol - 108-95-2	108-95-2	< 0.1	1.0
Ortho-tert-butylphenol - 88-18-6	88-18-6	< 0.1	

### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

### Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phenol 108-95-2	1000 lb	Х	Х	Х

## 6407 MONOLEC® R&O COMPRESSOR/TURBINE OIL

Issuing Date 04-24-2012

Revision Date 05-14-2020

Revision Number 4.1

### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phenol	1000 lb	1000 lb	RQ 1000 lb final RQ
108-95-2			RQ 454 kg final RQ

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

<u>NFPA</u>	Health hazard 1	Flammability 1	Stability 1	
16. OTHER INFOR	MATION			
Issuing Date	04-24-2012			
Revision Date	05-14-2020	05-14-2020		
Reason for revision	General Info	General Information.		
<u>Disclaimer</u>				
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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**