



## SAFETY DATA SHEET

SDS: 1605

### 1605 DUOLEC® INDUSTRIAL GEAR OIL

Issuing Date 04-24-2012

Revision Date 07-06-2018

Revision Number 5.1

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

**Product Identifier****Product Name** 1605 DUOLEC® INDUSTRIAL GEAR 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 Overview****Signal Word**

None

**Hazard Statements**

None

The product contains no substances which at their given concentration, are considered to be hazardous to health

**appearance** purple**Physical state** liquid**Odor** Hydrocarbon-like**Precautionary 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

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

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

The producer of "1605" declares that it contains less than 3% DMSO extractable material by IP-346

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**4. FIRST AID MEASURES****First Aid Measures**

<b>General Advice</b>	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.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
<b>Skin Contact</b>	Consult a physician if necessary. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air. Consult a physician. If not breathing, give artificial respiration.
<b>Ingestion</b>	May cause adverse kidney effects. Drink plenty of water. Do NOT induce vomiting.
<b>Protection of First-aiders</b>	Use personal protective equipment.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** None known.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

<b>Flash Point</b>	210 °C / 410 °F
<b>Suitable Extinguishing Media</b>	Water spray, Carbon dioxide (CO2), Foam, Dry chemical
<b>Unsuitable Extinguishing Media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Specific Hazards Arising from the Chemical</b>	Thermal decomposition can lead to release of irritating gases and vapors.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	Not impact sensitive.
<b>Sensitivity to Static Discharge</b>	May be ignited by friction, heat, sparks or flames.
<b>Protective Equipment and Precautions for Firefighters</b>	Wear self-contained breathing apparatus and protective suit.

**NFPA** Health hazard 1 Flammability 1 Stability 1

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protective equipment.

**Environmental Precautions**

**Environmental Precautions** Prevent entry into waterways, sewers, basements or confined areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

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Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

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

**7. HANDLING AND STORAGE****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, including any incompatibilities**

**Technical measures/Storage conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep in a banded area.

**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
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>
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>
Naphthalene 91-20-3	TWA: 10 ppm S*	TWA: 10 ppm TWA: 50 mg/m <sup>3</sup> (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m <sup>3</sup> (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m <sup>3</sup>	IDLH: 250 ppm TWA: 10 ppm TWA: 50 mg/m <sup>3</sup> STEL: 15 ppm STEL: 75 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** Tightly fitting safety goggles.

**Skin and Body Protection** Long sleeved clothing. Protective gloves.

**Respiratory Protection** No protective equipment is needed under normal use conditions. If exposure limits are

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exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures**

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties**

Physical state	liquid
appearance	purple
Odor	Hydrocarbon-like
Odor threshold	No information available

**Property****Property**

pH	6 - 8
Melting point/freezing point	No data available
Boiling Point/Range	no data available
Flash Point	210 °C / 410 °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	0.884
Water solubility	negligible
Partition Coefficient: n-octanol/water	no data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity, kinematic	231 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**

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known or supplied information
<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye Contact</b>	Contact with eyes may cause irritation.
<b>Skin Contact</b>	May cause irritation.

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**Ingestion**

There is no data available for this product.

**Component Information**

No information available

**Information on toxicological effects****Symptoms**

No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

The producer of "1605" 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 calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 15343 mg/kg

ATEmix (dermal) 6138 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

The product is insoluble and floats on water.

Chemical name	Log Pow
Naphthalene 91-20-3	3.6

**Other Adverse Effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Waste Disposal Methods**

Should not be released into the environment. Dispose of in accordance with local regulations.

**Contaminated Packaging**

Do not re-use empty containers. Empty containers should be taken to an approved waste

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handling site for recycling or disposal.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Naphthalene 91-20-3	U165	Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145 Included in waste stream: K022		

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Naphthalene 91-20-3			Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

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
Naphthalene 91-20-3	Toxic

**14. TRANSPORT INFORMATION**DOT Not regulated**15. REGULATORY INFORMATION****International Inventories**

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

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TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - 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****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 %
Naphthalene - 91-20-3	91-20-3	0.0005	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
Naphthalene 91-20-3	100 lb	X	X	X

**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)
Naphthalene 91-20-3	100 lb 1 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ RQ 1 lb final RQ RQ 0.454 kg final RQ

**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Prop. 65
Naphthalene - 91-20-3	Carcinogen

**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



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**16. OTHER INFORMATION**

Issuing Date 04-24-2012  
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Reason for revision Update to Format.

**Disclaimer**

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

SDS is available at [www.LElubricants.com](http://www.LElubricants.com)**End of Safety Data Sheet**