



Prepared according to Commission Regulation (EU) No 453/2010.

<b>Section 1</b>	<b>Identification of substance/mixture and of the company/undertaking</b>
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**1.1 Product Identifier****PERKINS DFSC PART NO T400012**

Synonyms None.

**1.2 Relevant identified uses of the substance or mixture and (uses advised against)**

Relevant identified uses (see section 7.3 for information on REACH registered uses)

Multipurpose.

**1.3 Details of the supplier of the safety data sheet**

The Lubrizol Corporation  
29400 Lakeland Boulevard  
Wickliffe, Ohio 44092  
Tel: (440) 943-4200

E-mail contact EUSDS@lubrizol.com

**1.4 Emergency Telephone number**

IN CASE OF TRANSPORT EMERGENCY, CALL (02) 9741 5213 IN AUSTRALIA, OR CHEMTREC INTERNATIONAL (+1) (703-527-3887).  
COLLECT CALLS ACCEPTED

<b>Section 2</b>	<b>Hazards Identification</b>
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**2.1 Classification of the substance or mixture**

(EC) No 1272/2008

Skin Irrit. 2; H315

Eye Irrit. 2; H319

67/548/EC or 1999/45/EC

This product does not meet the classification requirements of the current European legislation.

For a full text of R- and H- phrases: See section 16

**2.2 Label elements**

(EC) No 1272/2008



Warning.

Causes skin irritation.

Causes serious eye irritation.

Wear protective gloves / eye protection / face protection. Wash thoroughly after handling.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Store away from acids.

All disposal practices must be in accordance with local, national and international regulations.

**Supplemental label information**

None.

**2.3 Other hazards**

None identified.

<b>Section 3</b>	<b>Composition/Information on Ingredients</b>
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**3.2 Mixtures**

(EC) No 1272/2008

EC No.	Registration Number	Percentage (by wt.)	Name	Classification
265-149-8	Not Available	From 20 to 29.9 percent	Petroleum distillates, hydrotreated light	Asp. Tox. 1; H304

203-234-3	01-2119487289-20	From 10 to 19.9 percent	2-Ethylhexanol	Flam. Liq. 3; H226 Acute Tox. 4; H332 Eye Irrit. 2; H319 Skin Irrit. 2; H315 STOT SE 3; H335
Polymer	Not Available	From 10 to 19.9 percent	Butanedioic acid, polyisobutenyl derivatives	Eye Irrit. 2; H319

**67/548/EC or 1999/45/EC**

EC No.	Registration Number	Percentage (by wt.)	Name	Classification 67/548/EC
265-149-8	Not Available	From 20 to 29.9 percent	Petroleum distillates, hydrotreated light	Xn R65
203-234-3	01-2119487289-20	From 10 to 19.9 percent	2-Ethylhexanol	Xn R20 R36/37/38

<b>Section 4</b>	<b>First Aid Measures</b>
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**4.1 Description of first aid measures**

**Skin**

Immediately remove contaminated clothing and flush with cool water for at least 15 minutes. Get emergency medical help. Immediately remove contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse and discard leather articles saturated with the material.

**Eyes**

Rinse cautiously with water for 20 minutes or until chemical is removed. Remove contact lenses, if present and easy to do. Immediately call a poison center or doctor.

**Inhaled**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. Call a poison center or doctor.

**Swallowed**

Do NOT induce vomiting. Never give anything by mouth to a person who is losing consciousness, unconscious or convulsing. Rinse mouth and then drink plenty of water, seek medical attention Call a poison center or doctor if exposed or you feel unwell.

**Advice for first-aid providers**

When providing first aid always protect yourself against exposure to chemicals or blood born diseases by wearing gloves, masks and eye protection. If providing CPR use mouthpieces, resuscitation bags, pocket masks or other ventilation devices. After providing first aid wash your exposed skin with soap and water.

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

See section 11.

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

Note to physician: Treat symptomatically.

<b>Section 5</b>	<b>Fire Fighting Measures</b>
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**5.1 Extinguishing Media**

CO2, dry chemical, foam, water spray, water fog. Water can be used to cool and protect exposed material

**5.2 Special hazards arising from substance or mixture**

Explosion risk in case of fire. Toxic fumes, gases or vapors may evolve on burning. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Container may rupture on heating. Keep material away from heat, sparks, pilot lights, static electricity and open flame. Vapors may form explosive mixtures with air. If possible, immediately isolate from fire. May explode when heated. Liquid evaporates and forms vapor (fumes) which can catch fire and burn. Prevent static discharge. DO NOT USE a solid stream of water. See section 10 for additional information.

**5.3 Advice for firefighters**

Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Water may cause splattering. Use water to cool containers exposed to fire. A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. Leaking gas fires: Do not extinguish, unless leak can be stopped safely. If possible, immediately isolate material from fire. Use water with care to avoid possible violent production of steam. In case of fire, evacuate area. Do not release chemically contaminated water into drains, soil or surface water.

<b>Section 6</b>	<b>Accidental Release Measures</b>
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**6.1 Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Only trained personnel should be permitted in area. Personal protective equipment must be worn. Ventilate area if spilled in a confined space or other poorly ventilated area. Eliminate all ignition sources if safe to do so.

**6.2 Environmental precautions**

Material will float on water. Do not flush into surface water, sanitary sewer or ground water system.

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## 6.3 Methods and material for containment and cleaning up

Use non-sparking tools. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Small spills: contain spilled material. Transfer to secure containers. Where necessary collect using absorbent media. Larger spills: stop spill and dike area to prevent spreading, pump liquid to salvage tank. remaining liquid may be taken up on sand, clay, earth, floor absorbent or other absorbent material and shoveled into containers.

## 6.4 Reference to other sections

See sections 8 and 13 for additional information.

Section 7	Handling and Storage
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## 7.1 Precautions for safe handling

Keep away from potential sources of ignition. Open container in a well ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Vapours are heavier than air and will tend to accumulate in low areas. Avoid use in confined areas without adequate ventilation. Areas of inadequate ventilation could contain concentrations high enough to cause eye irritation, headaches, respiratory discomfort or nausea. Carefully evaluate processes using this product at elevated temperatures to ensure safe operating conditions. Avoid breathing dust, fume, gas, mist, vapors or spray. Electrostatic buildup may occur when pouring or transferring this product from its container. The spark produced may be sufficient to ignite vapors of flammable liquids. Always transfer product by means which avoid static buildup. Avoid pouring product directly from its container into combustible or flammable solvent. Static ignition hazard can result from handling and use. Electrically bond and ground all containers and equipment before transfer or use of material. Keep container tightly closed. Isolate from sources of heat, sparks, and open flame. No sparking tools should be used. Use grounding and bonding connection when transferring material to prevent static discharge, fire and explosion. Use spark-resistant tools. Do not breathe thermal decomposition products. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Empty containers retain material residue. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

### Pumping Temperature

Ambient

### Maximum Handling Temperature

50 °C, 122 °F

### Loading Temperature

50 °C, 122 °F

## 7.2 Conditions for safe storage, including any incompatibilities

Keep material away from heat, sparks, pilot lights, static electricity and open flame. Store in a well-ventilated place. Keep cool. Do not store or handle in aluminum equipment at temperatures over 120 deg F (49 deg C). Store at a temperature between 34 deg F and 120 deg F (between 1 deg C and 49 deg C). Store in containers made of same material as original container. Shelf life is two (2) years. Do not store near alkalis. Do not store near acids. See section 10 for incompatible materials.

### Maximum Storage Temperature

45 °C, 113 °F

## 7.3 Specific end use(s)

End uses are listed in an attached exposure scenario when one is required.

Section 8	Exposure Controls/Personal Protection
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## 8.1 Control parameters

Country	Substance	Long Term (8 Hours T.W.A.)	Short Term (15 mins.)
Austria	2-Ethylhexanol	50 ppm	100 ppm
Poland	2-Ethylhexanol	160 mg/cu. M	320 mg/cu. M
Switzerland	2-Ethylhexanol	20 ppm	20 ppm
Germany (TRGS 900)	2-Ethylhexanol	20 ppm	N/E

### Other Exposure Limits

Contains mineral oil. Under conditions which may generate mists, observe the Worksafe Australia exposure limit of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter. See Guidance Note [NOHSC:3008 (1995)].

## 8.2 Exposure controls

Use local exhaust ventilation to control mists or vapors. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits. Use explosion proof equipment.

### Eye/face protection

Chemical goggles or faceshield.

### Skin protection

Natural Rubber. Polyvinyl chloride. Viton. Recommended order of use: 4H, Butyl, Neoprene, Nitrile, PVC-coated. Gloves should always be inspected before each use and discarded if they show tears, pinholes, or signs of wear.

Long sleeve shirt is recommended. Wear either a chemical protective suit or apron when potential for contact with material exists. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

### Respiratory Protection

Use full face respirator with a combination organic vapor and dust/mist cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

**Hygiene Measures**

Wash thoroughly after handling this product.

**Environmental exposure controls**

See section 6 for details.

<b>Section 9</b>	<b>Physical and Chemical Properties</b>
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**9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	Dark red liquid.
<b>Odor</b>	Mild
<b>Odor Threshold</b>	Not determined.
<b>pH</b>	Not determined.
<b>Melting / Freezing Point</b>	Not determined.
<b>Boiling Point</b>	Not determined.
<b>Boiling Point Range</b>	Not determined.
<b>Flash Point</b>	67 °C, 152.6 °F PMCC (Typical)
<b>Evaporation Rate</b>	Not determined.
<b>Flammability (solid,gas)</b>	Not applicable.
<b>Lower flammability or explosive limit</b>	Not determined.
<b>Upper flammability or explosive limit</b>	Not determined.
<b>Vapour Pressure</b>	Not determined.
<b>Vapour Density</b>	Not determined.
<b>Relative density</b>	0.89 (15.6 °C)
<b>Bulk Density</b>	7.44 Lb/gal, 0.89 Kg/L
<b>Water Solubility</b>	Insoluble.
<b>Other solubilities</b>	Not determined.
<b>Partition coefficient: n-octanol/water</b>	Not determined.
<b>Autoignition Point</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	2600 Centistokes (0 °C) 225 Centistokes (40 °C)
<b>Explosive properties</b>	Material does not have explosive properties.
<b>Oxidising properties</b>	Material is a non-oxidising substance.

**9.2 Other information**

<b>Pour Point Temperature</b>	-54 °C, -65 °F
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*The above data are typical values and do not constitute a specification.*

<b>Section 10</b>	<b>Stability and Reactivity</b>
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**10.1 Reactivity**

Carefully review all information provided in sections 10.2 - 10.6.

**10.2 Chemical stability**

Material is normally stable at moderately elevated temperatures and pressures.

**10.3 Possibility of hazardous reactions**

Will not occur.

**10.4 Conditions to avoid**

Do not expose to excessive heat, ignition sources, or oxidizing materials. Elevated temperatures. Contact with strong oxidizers. Contact with strong caustic agents. Acids.

**10.5 Incompatible materials**

Strong oxidizing agents.

**10.6 Hazardous decomposition products**

Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Under combustion conditions, oxides of the following

## Section 11

## Toxicological Information

**11.1 Information on toxicological effects****Acute toxicity****Oral**

The LD50 in rats is > 2000 mg/Kg. Based on data from components or similar materials. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain. Ingestion may cause CNS depression. Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in pulmonary edema and chemical pneumonitis.

**Dermal**

The LD50 in rabbits is > 5000 mg/Kg. Based on data from components or similar materials.

**Inhalation**

The LC50 (4 hr.) in rats for dust or mist of this material is 5.0 - 50 mg/l. Based on data from components or similar materials. High concentrations may cause headaches, dizziness, nausea, behavioral changes, weakness, drowsiness and stupor.

	Percentage (by wt.)	LC50 (4 Hr.)	Form
2-Ethylhexanol	From 10 to 19.9 percent	2.7mg/l	Particulate/Mist

**Skin corrosion / irritation**

Skin irritant. Based on data from similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

**Serious eye damage / irritation**

Weak to moderate eye irritant. Does not meet EU R36 criteria. Based on data from similar materials.

**Respiratory Irritation**

Nose, throat and lung irritant. Based on data from similar materials. Exposure to a high concentration of vapor or mist may cause severe irritation to the nose and upper respiratory tract. Breathing of vapor or mist may aggravate asthma and inflammatory or fibrotic pulmonary disease.

**Respiratory or skin sensitization****Skin**

No data available to indicate product or components may be a skin sensitizer.

**Respiratory**

No data available to indicate product or components may be respiratory sensitizers.

**Germ cell mutagenicity**

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**

This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extrables by the IP 346 test.

**Reproductive Toxicity**

No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

No evidence of adverse effects were found in a developmental toxicity study of 2-ethylhexanol in rats. Doses up to 3 ml/kg applied to the skin during the most critical part of the gestation period produced evidence of toxicity to mothers, but no evidence of injury in the developing offspring. In a previous study, birth defects were observed by oral administration, an unlikely route of exposure in the workplace.

**STOT repeated exposure**

Repeated overexposure to petroleum naphtha can cause nervous system damage. A 14-day dermal toxicity study of 2-ethylhexanol in rats showed blood effects, decreased spleen weight and decreased triglycerides. Repeated ingestion of 2-ethylhexanol may cause injury to the liver and kidneys.

**Other information**

No other health hazards known.

## Section 12

## Ecological Information

**12.1 Toxicity****Freshwater fish**

Not determined.

**Freshwater invertebrates**

Not determined.

**Algae**

Not determined.

**Saltwater fish**

Not determined.

**Saltwater invertebrates**

Not determined.

**Bacteria**

Not determined.

**12.2 Persistence and degradability**

Not applicable.

**12.3 Bioaccumulative potential**

Not applicable.

**12.4 Mobility in soil**

Not applicable.

**12.5 Results of PBT and vPvB assessment**

Not Available

**12.6 Other adverse effects**

None known.

<b>Section 13</b>	<b>Disposal Considerations</b>
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**13.1 Waste treatment methods**

All disposal practices must be in accordance with local, regional, national and international regulations.

Empty container retains product residue and can be hazardous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity, or other sources of ignition. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

<b>Section 14</b>	<b>Transport Information</b>
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**14.1 UN number**

<b>ADR/RID</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IMDG</b>	Not regulated

**14.2 UN proper shipping name**

<b>ADR/RID</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IMDG</b>	Not regulated

**14.3 Transport hazard class(es)**

<b>ADR/RID</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IMDG</b>	Not regulated

**14.4 Packing group**

<b>ADR/RID</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IMDG</b>	Not regulated

**14.5 Environmental hazards**

<b>ADR/RID</b>	Not applicable.
<b>ICAO</b>	Not applicable.
<b>IMDG</b>	Not applicable.

**14.6 Special precautions for users**

Review classification requirements before shipping materials at elevated temperatures.

**14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC code**

Not determined.

<b>Section 15</b>	<b>Regulatory Information</b>
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**15.1 Safety, health and environment regulations / legislation specific for the substance or mixture**

**Global Chemical Inventories**

<b>Australia</b>	A component(s) of this product has been notified and assessed under the Industrial Chemicals (Notification and Assessment) Act, 1989. This product may be imported only by Lubrizol Australia.
<b>Canada</b>	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
<b>China</b>	This product may be imported to China only by Lubrizol China.
<b>EU</b>	All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.
<b>Japan</b>	This product requires notification in Japan.
<b>Korea</b>	All components are in compliance in Korea.
<b>New Zealand</b>	All components are in compliance with chemical notification requirements in New Zealand.
<b>Philippines</b>	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
<b>Switzerland</b>	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

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**Taiwan** May require notification before sale in Taiwan.

**USA** All components of this material are on the US TSCA Inventory or are exempt.

## German water hazard classes

WGK = 2 according to the Water Hazardous Directive, VwVwS, dated May 17, 1999.

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

Section 16	Other Information
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### Created by

Product Safety and Compliance Department (440-943-1200)

### Created Date

19 March 2009

### Revision date

04 August 2011

### SDS No.

11044042-1501218-0011131-102103

### HMIS Codes

Health	Fire	Reactivity
2*	2	0

### Relevant R Phrases

R20 -- Harmful by inhalation.

R36/37/38 -- Irritating to eyes, respiratory system and skin.

R65 -- Harmful: may cause lung damage if swallowed.

### Relevant hazard phrases

H226 - Flammable liquid and vapor.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

### Revision Indicators

Section: 2 CLP Hazard Class	Changed: 4 August 2011
Section: 2 CLP Hazard statements	Changed: 4 August 2011
Section: 2 GHS Prevention statement(s)	Changed: 4 August 2011
Section: 2 Disposal	Changed: 29 July 2011
Section: 2 Extinguishing media.	Changed: 26 February 2011
Section: 2 Oral first aid.	Changed: 26 February 2011
Section: 2 Skin first aid.	Changed: 29 July 2011
Section: 2 Storage procedures.	Changed: 4 August 2011
Section: 4 Eyes first aid.	Changed: 29 July 2011
Section: 4 Inhalation first aid.	Changed: 4 August 2011
Section: 4 Oral first aid.	Changed: 29 July 2011
Section: 4 Skin first aid.	Changed: 29 July 2011
Section: 5 Extinguishing media.	Changed: 29 July 2011
Section: 5 Special firefighting procedures.	Changed: 29 July 2011
Section: 5 Unusual fire& explosion hazards.	Changed: 1 August 2011
Section: 6 Environmental precautions	Changed: 29 July 2011
Section: 6 Methods for clean-up, removal	Changed: 29 July 2011
Section: 6 Personal precaution	Changed: 29 July 2011
Section: 7 Handling procedures.	Changed: 29 July 2011
Section: 7 Storage procedures.	Changed: 4 August 2011
Section: 8 Eye protection.	Changed: 29 July 2011
Section: 8 Glove protection.	Changed: 29 July 2011
Section: 8 Ventilation procedures.	Changed: 29 July 2011
Section: 10 Conditions to avoid.	Changed: 29 July 2011
Section: 11 Dermal toxicity.	Changed: 29 July 2011
Section: 11 Eye irritation.	Changed: 29 July 2011
Section: 11 Inhalation toxicity.	Changed: 29 July 2011
Section: 11 Respiratory irritation.	Changed: 4 August 2011
Section: 11 Skin irritation.	Changed: 29 July 2011

Section: 15 EU EINECS.

Section: 16 Relevant hazard phrases

Section: 16 HMIS codes.

Changed: 3 December 2010

Changed: 29 July 2011

Changed: 1 August 2011

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