

**SAFETY DATA SHEET****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

<b>Product name</b>	<b>Special lubricant DARDA</b>
<b>UFI:</b>	n.V.
<b>Product code</b>	3391 6111 00 – 400g / 3391 0942 00 – 1kg / 3391 0980 50 – 18kg
<b>SDS #</b>	n.V.
<b>Product type</b>	Grease

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

Identified uses
<input checked="" type="checkbox"/> General use of lubricants and greases in vehicles or machinery-Industrial General use of lubricants and greases in vehicles or machinery-Professional

<b>Use of the substance/ mixture</b>	Grease for industrial applications For specific application advice see appropriate Technical Data Sheet or consult our company representative.
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**1.3 Details of the supplier of the safety data sheet**

<b>Supplier</b>	Darda GmbH Im Tal 1, DE-78176 Blumberg, Germany  Telefon: +49 (0)7702 4391 0, Telefax: +49 (0)7702 4391 12
<b>E-mail address</b>	<a href="mailto:info@darda.de">info@darda.de</a>

**1.4 Emergency telephone number**

<b>EMERGENCY TELEPHONE NUMBER</b>	DARDA GmbH T: +49 (0)7702 4391 0
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**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

<b>Product definition</b>	Mixture
<b>Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]</b>	<input checked="" type="checkbox"/> Aquatic Chronic 2, H411

See Section 16 for the full text of the H statements declared above.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

**2.2 Label elements****Hazard pictograms**

<b>Signal word</b>	<input checked="" type="checkbox"/> No signal word.
<b>Hazard statements</b>	<input checked="" type="checkbox"/> H411 - Toxic to aquatic life with long lasting effects.
<b>Precautionary statements</b>	
<b>Prevention</b>	<input checked="" type="checkbox"/> P273 - Avoid release to the environment.
<b>Response</b>	<input checked="" type="checkbox"/> P391 - Collect spillage.
<b>Storage</b>	Not applicable.
<b>Disposal</b>	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazardous ingredients</b>	Not applicable.
<b>Supplemental label elements</b>	<input checked="" type="checkbox"/> Contains Fatty acids, tall-oil, compds. with (Z)-N-9-octadecenyl-1,3-propanediamine (2:1) and Naphthenic acids, zinc salts, basic. May produce an allergic reaction. Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

**EU Regulation (EC) No. 1907/2006 (REACH)**

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**SECTION 2: Hazards identification**

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** Not applicable.

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** Not applicable.

**Tactile warning of danger** Not applicable.

**2.3 Other hazards**

**Results of PBT and vPvB assessment** Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** Defatting to the skin.  
Note: High Pressure Applications  
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency.  
See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Experimental data on one or more of the components has been used to determine all or part of the hazard classification of this product.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

**Product definition** Mixture

Highly refined mineral oil and additives. Thickening agent.

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Distillates (petroleum), hydrotreated heavy naphthenic	REACH #: 01-2119467170-45 EC: 265-155-0 CAS: 64742-52-5 Index: 649-465-00-7	≥10 - ≤25	Not classified.	-	[2]
Distillates (petroleum), solvent-dewaxed heavy paraffinic	REACH #: 01-2119471299-27 EC: 265-169-7 CAS: 64742-65-0 Index: 649-474-00-6	≥10 - ≤25	Not classified.	-	[2]
Zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≤10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1] [2]
Fatty acids, tall-oil, compds. with (Z)-N-9-octadecenyl-1,3-propanediamine (2:1)	REACH #: 01-2120790791-44 EC: 295-184-4 CAS: 91845-13-5	≤5	Skin Sens. 1A, H317 Aquatic Chronic 2, H411	-	[1]
Lithium 12-hydroxystearate	EC: 231-536-5 CAS: 7620-77-1	≤3	Not classified.	-	[2]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2	≤3	Carc. 2, H351 (inhalation)	-	[1] [2] [*]
Distillates (petroleum), hydrotreated light naphthenic	REACH #: 01-2119480375-34 EC: 265-156-6 CAS: 64742-53-6 Index: 649-466-00-2	≤3	Asp. Tox. 1, H304	-	[1] [2]
Fatty acids, C16-18 (even	REACH #:	≤3	Not classified.	-	[2]

**Product name** Special lubricant DARDA

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### SECTION 3: Composition/information on ingredients

numbered), aluminum salts	01-2119978504-28 EC: - CAS: 1471315-26-0			
Naphthenic acids, zinc salts, basic	REACH #: <1 01-2119988500-34 EC: 282-762-6 CAS: 84418-50-8		Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412	- [1]

See Section 16 for the full text of the H statements declared above.

Type

- [1] Substance classified with a health or environmental hazard
  - [2] Substance with a workplace exposure limit
  - [\*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter ≤ 10 µm not bound within a matrix.
- Occupational exposure limits, if available, are listed in Section 8.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- Eye contact** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
- Skin contact** Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.
- Inhalation** If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.
- Ingestion** Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention if symptoms occur.
- Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

See Section 11 for more detailed information on health effects and symptoms.

##### Potential acute health effects

- Inhalation** Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Ingestion** No known significant effects or critical hazards.
- Skin contact** Defatting to the skin. May cause skin dryness and irritation. Not considered a skin sensitizer. Based on data available for this or related materials.
- Eye contact**  No known significant effects or critical hazards.

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

- Inhalation** Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.
- Ingestion** Ingestion of large quantities may cause nausea and diarrhoea.
- Eye contact** Potential risk of transient stinging or redness if accidental eye contact occurs.

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

- Notes to physician** Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.  
Note: High Pressure Applications  
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**

Use foam or all-purpose dry chemical to extinguish.

**Unsuitable extinguishing media**

Do not use water jet. The use of a water jet may cause the fire to spread by splashing the burning product.

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

**Hazards from the substance or mixture**

No specific fire or explosion hazard.

**Hazardous combustion products**

Combustion products may include the following:  
 carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide)  
 metal oxide/oxides  
 nitrogen oxides (NO, NO<sub>2</sub> etc.)  
 phosphorus oxides

### 5.3 Advice for firefighters

**Special precautions for fire-fighters**

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Special protective equipment for fire-fighters**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel**

Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. Provide adequate ventilation. Put on appropriate personal protective equipment.

**For emergency responders**

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

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

**Small spill**

Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

**Large spill**

Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. If emergency personnel are unavailable, contain spilt material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. Dispose of via a licensed waste disposal contractor.

### 6.4 Reference to other sections

See Section 1 for emergency contact information.  
 See Section 5 for firefighting measures.  
 See Section 8 for information on appropriate personal protective equipment.  
 See Section 12 for environmental precautions.  
 See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

## SECTION 7: Handling and storage

**Protective measures** Put on appropriate personal protective equipment. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid contact of spilled material and runoff with soil and surface waterways. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Empty containers retain product residue and can be hazardous.

**Advice on general occupational hygiene** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**7.2 Conditions for safe storage, including any incompatibilities** Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store and use only in equipment/containers designed for use with this product. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

**Not suitable** Prolonged exposure to elevated temperature

### 7.3 Specific end use(s)

**Recommendations** See section 1.2 and Exposure scenarios in annex, if applicable.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
Distillates (petroleum), hydrotreated heavy naphthenic	<b>Work environment authority Regulation 2018:1 (Sweden).</b> TWA: 1 mg/m <sup>3</sup> 8 hours. Issued/Revised: 8/1996 Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Issued/Revised: 8/1996 Form: mist and fume
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<b>Work environment authority Regulation 2018:1 (Sweden).</b> TWA: 1 mg/m <sup>3</sup> 8 hours. Issued/Revised: 8/1996 Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Issued/Revised: 8/1996 Form: mist and fume
Zinc oxide	<b>Work environment authority Regulation 2018:1 (Sweden).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/Revised: 8/1996 Form: Total dust
Lithium 12-hydroxystearate	<b>Work environment authority Regulation 2018:1 (Sweden).</b> STEL: 0.02 mg/m <sup>3</sup> 15 minutes. Issued/Revised: 7/2012 Form: inhalable fraction
titanium dioxide	<b>Work environment authority Regulation 2018:1 (Sweden).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/Revised: 8/1996 Form: Total dust
Distillates (petroleum), hydrotreated light naphthenic	<b>Work environment authority Regulation 2018:1 (Sweden).</b> TWA: 1 mg/m <sup>3</sup> 8 hours. Issued/Revised: 8/1996 Form: mist and fume STEL: 3 mg/m <sup>3</sup> 15 minutes. Issued/Revised: 8/1996 Form: mist and fume
Fatty acids, C16-18 (even numbered), aluminum salts	<b>Work environment authority Regulation 2018:1 (Sweden).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/Revised: 8/1996 Form: Total dust

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

**Recommended monitoring procedures** If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**SECTION 8: Exposure controls/personal protection**

Biological exposure indices

**Product/ingredient name**

**Exposure indices**

No exposure indices known.

Derived No Effect Level

No DNELs/DMELs available.

Predicted No Effect Concentration

No PNECs available

**8.2 Exposure controls**

**Appropriate engineering controls**

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Individual protection measures

**Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment. For protection against metal working fluids, respiratory protection that is classified as “resistant to oil” (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m3), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m3). Where organic vapours are a potential hazard during metalworking operations, a combination particulate and organic vapour filter may be necessary. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

**Eye/face protection**

Safety glasses with side shields.

Skin protection

**Hand protection**

**General Information:**

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures).

Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.

Recommended: Nitrile gloves.

**Breakthrough time:**

Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type. Our recommendations on the selection of gloves are as follows:

Continuous contact:

Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained. If suitable gloves are not available to offer that level of protection, gloves with shorter

## SECTION 8: Exposure controls/personal protection

breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to.

Short-term / splash protection:

Recommended breakthrough times as above.  
It is recognised that for short-term, transient exposures, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

### Glove Thickness:

For general applications, we recommend gloves with a thickness typically greater than 0.35 mm.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times. Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

### Skin and body

Use of protective clothing is good industrial practice. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

### Refer to standards:

- Respiratory protection: EN 529
- Gloves: EN 420, EN 374
- Eye protection: EN 166
- Filtering half-mask: EN 149
- Filtering half-mask with valve: EN 405
- Half-mask: EN 140 plus filter
- Full-face mask: EN 136 plus filter
- Particulate filters: EN 143
- Gas/combined filters: EN 14387

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	Grease
Colour	White. [Light]
Odour	Not available.
Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.

## SECTION 9: Physical and chemical properties

<b>Initial boiling point and boiling range</b>	Not available.
<b>Drop Point</b>	>165 °C
<b>Flash point</b>	Closed cup: 220°C (428°F) [Estimated. Based on Lubricants - Base Oils]
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Lower and upper explosion limit</b>	Not applicable.
<b>Vapour pressure</b>	Not available.
<b>Relative vapour density</b>	Not applicable.
<b>Relative density</b>	Not available.
<b>Density</b>	>1000 kg/m <sup>3</sup> (>1 g/cm <sup>3</sup> ) at 20°C

**Solubility(ies)**

Media	Result
Water	Not soluble

<b>Partition coefficient: n-octanol/water</b>	Not applicable.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Penetration Number (0.1 mm)</b>	310 to 340 at 25°C
<b>Explosive properties</b>	Not available.
<b>Oxidising properties</b>	Not available.

**Particle characteristics**

**Median particle size** Not available.

**9.2 Other information**

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
<b>10.2 Chemical stability</b>	The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
<b>10.4 Conditions to avoid</b>	Avoid all possible sources of ignition (spark or flame).
<b>10.5 Incompatible materials</b>	Reactive or incompatible with the following materials: oxidising materials.
<b>10.6 Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity estimates**

Not available.

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

**Information on likely routes of exposure** Routes of entry anticipated: Dermal, Inhalation.

**Potential acute health effects**

**Inhalation** Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Ingestion** No known significant effects or critical hazards.

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**SECTION 11: Toxicological information**

**Skin contact** Defatting to the skin. May cause skin dryness and irritation.  
Not considered a skin sensitizer. Based on data available for this or related materials.

**Eye contact**  No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Inhalation** No specific data.

**Ingestion** No specific data.

**Skin contact** Adverse symptoms may include the following:  
irritation  
dryness  
cracking

**Eye contact**  No specific data.

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

**Inhalation** Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.

**Ingestion** Ingestion of large quantities may cause nausea and diarrhoea.

**Eye contact** Potential risk of transient stinging or redness if accidental eye contact occurs.

**Potential chronic health effects**

**General** No known significant effects or critical hazards.

**Carcinogenicity** No known significant effects or critical hazards.

**Mutagenicity** No known significant effects or critical hazards.

**Developmental effects** No known significant effects or critical hazards.

**Fertility effects** No known significant effects or critical hazards.

**11.2 Information on other hazards**

**11.2.1 Endocrine disrupting properties**

Not available.

**Remarks - Endocrine disruptor - Health**  Not available.

**11.2.2 Other information**

Not available.

**SECTION 12: Ecological information**

**12.1 Toxicity**

**Environmental hazards** Toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability**

Not expected to be rapidly degradable.

**12.3 Bioaccumulative potential**

Not available.

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** Not available.

**Mobility** Paste. insoluble in water.

**12.5 Results of PBT and vPvB assessment**

Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

**12.6 Endocrine disrupting properties** Not available.

**Remarks - Endocrine disruptor - Environment**  Not available.

**12.7 Other adverse effects** No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**13.1 Waste treatment methods**

Product

**Methods of disposal** Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

**Hazardous waste** Yes.

European waste catalogue (EWC)

Waste code	Waste designation
12 01 12*	spent waxes and fats

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Packaging

**Methods of disposal** Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

Waste code	European waste catalogue (EWC)
15 01 10*	packaging containing residues of or contaminated by hazardous substances

**Special precautions** This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**Methods of disposal** The regulations regarding manufacturers' responsibility for packaging material waste is regulated in "Förordningen om producentansvar för förpackningar". Packaging materials are to be reused or recycled in accordance with the goals outlined in this regulation. The company complies with this manufacturer's responsibility through its association with REPA, which is a subsidiary company of four materials handling companies. The materials handling companies collect, remove and process used and sorted packaging materials through the employment of contractors. Questions regarding collection of packaging materials on a local basis may be directed to the materials company and its contractors. For further information, contact REPA, www.repa.se.

Scrape the package well, recover and add the remainders in the process where the product is used, or send for special waste treatment. Send to a certified recycler/receiver.

**References** Commission 2014/955/EU  
Directive 2008/98/EC

**SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number or ID number</b>	UN3077	UN3077	UN3077	UN3077
<b>14.2 UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)	Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)	Environmentally hazardous substance, solid, n.o.s.. Marine pollutant (Zinc oxide)	Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)
<b>14.3 Transport hazard class(es)</b>	9 	9 	9 	9 
<b>14.4 Packing group</b>	III	III	III	III
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.	Yes.

**SECTION 14: Transport information**

<p><b>Additional information</b></p>	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.  <u>Hazard identification number</u>                  90  <u>Tunnel code</u> -</p>	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.</p>	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.  <u>Emergency schedules</u>                  F-A, S-F</p>	<p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.</p>
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**14.6 Special precautions for user** Not available.

**ADR/RID Classification code:** M7

**ADN Classification code:** M7

**14.7 Maritime transport in bulk according to IMO instruments** Not available.

**SECTION 15: Regulatory information**

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

EU Regulation (EC) No. 1907/2006 (REACH)

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** Not applicable.

Other regulations

**REACH Status** The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

**United States inventory (TSCA 8b)** All components are active or exempted.

**Australia inventory (AIIIC)** All components are listed or exempted.

**Canada inventory** At least one component is not listed.

**China inventory (IECSC)** All components are listed or exempted.

**Japan inventory (CSCL)** At least one component is not listed.

**Korea inventory (KECI)** At least one component is not listed.

**Philippines inventory (PICCS)** At least one component is not listed.

**Taiwan Chemical Substances Inventory (TCSI)** All components are listed or exempted.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

EU - Water framework directive - Priority substances

**SECTION 15: Regulatory information**

None of the components are listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

<b>Category</b>
E2

**15.2 Chemical safety assessment**

A Chemical Safety Assessment has been carried out for one or more of the substances within this mixture. A Chemical Safety Assessment has not been carried out for the mixture itself.

**SECTION 16: Other information**

**Abbreviations and acronyms**

- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- CAS = Chemical Abstracts Service
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- CSA = Chemical Safety Assessment
- CSR = Chemical Safety Report
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EINECS = European Inventory of Existing Commercial chemical Substances
- ES = Exposure Scenario
- EUH statement = CLP-specific Hazard statement
- EWC = European Waste Catalogue
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- OECD = Organisation for Economic Co-operation and Development
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- RRN = REACH Registration Number
- SADT = Self-Accelerating Decomposition Temperature
- SVHC = Substances of Very High Concern
- STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
- STOT-SE = Specific Target Organ Toxicity - Single Exposure
- TWA = Time weighted average
- UN = United Nations
- UVCB = Complex hydrocarbon substance
- VOC = Volatile Organic Compound
- vPvB = Very Persistent and Very Bioaccumulative
- Varies = may contain one or more of the following 64741-88-4 / RRN 01-2119488706-23, 64741-89-5 / RRN 01-2119487067-30, 64741-95-3 / RRN 01-2119487081-40, 64741-96-4/ RRN 01-2119483621-38, 64742-01-4 / RRN 01-2119488707-21, 64742-44-5 / RRN 01-2119985177-24, 64742-45-6, 64742-52-5 / RRN 01-2119467170-45, 64742-53-6 / RRN 01-2119480375-34, 64742-54-7 / RRN 01-2119484627-25, 64742-55-8 / RRN 01-2119487077-29, 64742-56-9 / RRN 01-2119480132-48, 64742-57-0 / RRN 01-2119489287-22, 64742-58-1, 64742-62-7 / RRN 01-2119480472-38, 64742-63-8, 64742-65-0 / RRN 01-2119471299-27, 64742-70-7 / RRN 01-2119487080-42, 72623-85-9 / RRN 01-2119555262-43, 72623-86-0 / RRN 01-2119474878-16, 72623-87-1 / RRN 01-2119474889-13

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Aquatic Chronic 2, H411	Calculation method

**SECTION 16: Other information**

<b>Full text of abbreviated H statements</b>	H304	May be fatal if swallowed and enters airways.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H351	Suspected of causing cancer.
	H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.
	H411	Toxic to aquatic life with long lasting effects.
	H412	Harmful to aquatic life with long lasting effects.
<b>Full text of classifications [CLP/GHS]</b>	Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
	Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
	Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
	Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
	Asp. Tox. 1	ASPIRATION HAZARD - Category 1
	Carc. 2	CARCINOGENICITY - Category 2
	Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
	Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A	

**History**

<b>Date of issue/ Date of revision</b>	10/11/2022.
<b>Date of previous issue</b>	18/08/2022.
<b>Prepared by</b>	Product Stewardship

**Indicates information that has changed from previously issued version.**

**Notice to reader**

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from Lifco-Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The Lifco-Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the Lifco-Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

## Annex to the extended Safety Data Sheet (eSDS)

Industrial

### Identification of the substance or mixture

<b>Product definition</b>	Mixture
<b>Code</b>	3391 6111 00 – 400g / 3391 0942 00 – 1kg / 3391 0980 50 – 18kg
<b>Product name</b>	Special lubricant DARDA T

### Section 1: Title

<b>Short title of the exposure scenario</b>	General use of lubricants and greases in vehicles or machinery - Industrial
<b>List of use descriptors</b>	<p><b>Identified use name:</b> General use of lubricants and greases in vehicles or machinery-Industrial</p> <p><b>Process Category:</b> PROC01, PROC08b, PROC09, PROC02</p> <p><b>Sector of end use:</b> SU03</p> <p><b>Subsequent service life relevant for that use:</b> No.</p> <p><b>Environmental Release Category:</b> ERC04, ERC07</p> <p><b>Specific Environmental Release Category:</b> ATIEL-ATC SPERC 4.Biv1</p>

<b>Processes and activities covered by the exposure scenario</b>	Covers general use of lubricants and greases in vehicles or machinery in closed systems. Includes filling and draining of containers and operation of enclosed machinery (including engines) and associated maintenance and storage activities.
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### Section 2 Operational conditions and risk management measures

#### Section 2.1 Control of worker exposure

No exposure scenario is presented because the product is not classified for Human Health

#### Contributing scenarios: Operational conditions and risk management measures

#### Section 2.2: Control of environmental exposure

##### Amounts used:

**EU tonnage of risk determining substance per year:** 2.63E+3 Tonnes/year

##### Frequency and duration of use:

**Emission days** 300

##### Environment factors not influenced by risk management:

**Local freshwater dilution factor** 10

**Local marine water dilution factor** 100

##### Other conditions affecting environmental exposure:

Negligible wastewater emissions as process operates without water contact.

**Release fraction to air (after typical onsite RMMs)** 5.00E-05

**Release fraction to soil from process (after typical onsite RMMs)** 0

**Release fraction to wastewater from process (after typical onsite RMMs and before sewage treatment plan)** Not available.

##### Technical conditions and measures at process level (source) to prevent release:

Common practices vary across sites thus conservative process release estimates used.

<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:</b>	Prevent discharge of undissolved substance to or recover from onsite wastewater. User sites are assumed to be provided with oil/water separators and waste water to be discharged via a sewage treatment plant
<b>Organisational measures to prevent/limit release from site:</b>	Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.
<b>Conditions and measures related to sewage treatment plant:</b>	
<b>Estimated substance removal from wastewater via on-site sewage treatment</b>	Not available.
<b>Assumed domestic sewage treatment plant flow rate (m3/d)</b>	2.00E+3
<b>Maximum allowable site tonnage (M<sub>Safe</sub>) based on release following total wastewater treatment removal as product:</b>	Not available.
<b>Conditions and measures related to external treatment of waste for disposal:</b>	External treatment and disposal of waste should comply with applicable local and/or national regulations.
<b>Conditions and measures related to external recovery of waste:</b>	External recovery and recycling of waste should comply with applicable local and/or national regulations.

### Section 3: Exposure estimation and reference to its source

<b>Exposure estimation and reference to its source - Environment</b>	
<b>Exposure assessment (environment):</b>	Used ECETOC TRA model (May 2010 release).

<b>Exposure estimation and reference to its source - Workers</b>	
<b>Exposure assessment (human):</b>	No exposure scenario is presented because the product is not classified for Human Health

### Section 4: Guidance to check compliance with the exposure scenario

<b>Environment</b>	Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see <a href="http://www.ATIEL.org/REACH_GES">www.ATIEL.org/REACH_GES</a>
<b>Health</b>	No exposure scenario is presented because the product is not classified for Human Health

## Annex to the extended Safety Data Sheet (eSDS)

Professional

### Identification of the substance or mixture

<b>Product definition</b>	Mixture
<b>Code</b>	3391 6111 00 – 400g / 3391 0942 00 – 1kg / 3391 0980 50 – 18kg
<b>Product name</b>	Special lubricant DARDA

### Section 1: Title

<b>Short title of the exposure scenario</b>	General use of lubricants and greases in vehicles or machinery - Professional
<b>List of use descriptors</b>	<p><b>Identified use name:</b> General use of lubricants and greases in vehicles or machinery-Professional</p> <p><b>Process Category:</b> PROC01, PROC02, PROC08a, PROC08b, PROC20</p> <p><b>Sector of end use:</b> SU22</p> <p><b>Subsequent service life relevant for that use:</b> No.</p> <p><b>Environmental Release Category:</b> ERC09a, ERC09b</p> <p><b>Specific Environmental Release Category:</b> ATIEL-ATC SPERC 9.Bp.v1</p>

<b>Processes and activities covered by the exposure scenario</b>	Covers general use of lubricants and greases in vehicles or machinery in closed systems. Includes filling and draining of containers and operation of enclosed machinery (including engines) and associated maintenance and storage activities.
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### Section 2 Operational conditions and risk management measures

#### Section 2.1 Control of worker exposure

No exposure scenario is presented because the product is not classified for Human Health

#### Contributing scenarios: Operational conditions and risk management measures

#### Section 2.2: Control of environmental exposure

##### Amounts used:

<b>EU tonnage of risk determining substance per year:</b>	5.39 Tonnes/year
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##### Frequency and duration of use:

<b>Emission days</b>	365
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##### Environment factors not influenced by risk management:

<b>Local freshwater dilution factor</b>	10
<b>Local marine water dilution factor</b>	100

##### Other conditions affecting environmental exposure:

Negligible wastewater emissions as process operates without water contact.

<b>Release fraction to air (after typical onsite RMMs)</b>	1.00E-04
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<b>Release fraction to soil from process (after typical onsite RMMs)</b>	1E-03
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<b>Release fraction to wastewater from process (after typical onsite RMMs and before sewage treatment plan)</b>	Not available.
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##### Technical conditions and measures at process level (source) to prevent release:

Common practices vary across sites thus conservative process release estimates used.

Special lubricant DARDA

**General use of lubricants and greases in vehicles or machinery - Professional**



<b>Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil:</b>	Prevent discharge of undissolved substance to or recover from onsite wastewater. User sites are assumed to be provided with oil/water separators and waste water to be discharged via a sewage treatment plant
<b>Organisational measures to prevent/limit release from site:</b>	Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.
<b>Conditions and measures related to sewage treatment plant:</b>	
<b>Estimated substance removal from wastewater via on-site sewage treatment</b>	No data available yet
<b>Assumed domestic sewage treatment plant flow rate (m3/d)</b>	2.00E+3
<b>Maximum allowable site tonnage (M<sub>Safe</sub>) based on release following total wastewater treatment removal as product:</b>	No data available yet
<b>Conditions and measures related to external treatment of waste for disposal:</b>	External treatment and disposal of waste should comply with applicable local and/or national regulations.
<b>Conditions and measures related to external recovery of waste:</b>	External recovery and recycling of waste should comply with applicable local and/or national regulations.

### Section 3: Exposure estimation and reference to its source

<b>Exposure estimation and reference to its source - Environment</b>	
<b>Exposure assessment (environment):</b>	Used ECETOC TRA model (May 2010 release).
<b>Exposure estimation and reference to its source - Workers</b>	
<b>Exposure assessment (human):</b>	No exposure scenario is presented because the product is not classified for Human Health

### Section 4: Guidance to check compliance with the exposure scenario

<b>Environment</b>	Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see <a href="http://www.ATIEL.org/REACH_GES">www.ATIEL.org/REACH_GES</a>
<b>Health</b>	No exposure scenario is presented because the product is not classified for Human Health