



**SAFETY DATA SHEET**  
Conforms to Regulation (EC) No. 1907/2006 (REACH)

# AERO DM 15W-50

SDS no. 30983  
:

## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

### 1.1 Product identifier

Product name : AERO DM 15W-50

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

Identified uses
Formulation additives, lubricants and greases - Industrial General use of lubricants and greases in vehicles or machinery - Industrial General use of lubricants and greases in vehicles or machinery - Professional Lubrication for aircraft piston engines

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

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rm.gb-msds@total.co.uk

### Contact

H.S.E

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

Telephone number : National Poisons Information Service (NPIS): 111

#### Supplier

Telephone number : Emergency telephone: +44 1235 239670

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Product definition : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

**Ingredients of unknown toxicity** : 2.9 percent of the mixture consists of component(s) of unknown acute oral toxicity  
2.9 percent of the mixture consists of component(s) of unknown acute dermal toxicity  
5.9 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

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

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

## 2.2 Label elements

**Signal word** : No signal word.

**Hazard statements** : H412 - Harmful to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : P273 - Avoid release to the environment.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** : Not applicable.

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

## 2.3 Other hazards

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** : Prolonged or repeated contact may dry skin and cause irritation.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
Distillates (petroleum), hydrotreated light paraffinic	REACH #: 01-2119487077-29 EC: 265-158-7 CAS: 64742-55-8	≤5	Asp. Tox. 1, H304	[1]
tris(methylphenyl) phosphate	REACH #: 01-2119531335-46 EC: 809-930-9 CAS: 1330-78-5	<2.5	Repr. 2, H361fd (Fertility and Unborn child) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) <b>See Section 16 for the full text of the H statements declared above.</b>	[1]

**Additional information** : Mineral oil of petroleum origin Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- 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

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

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

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
phosphorus oxides

#### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- 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** : 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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.

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

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. 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 original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

No exposure limit value known.

#### **Reportable hazardous constituent(s) contained in UVCB- and/or multi-constituent substance(s) complying with the classification criteria and/or with an exposure limit (OEL)**

No exposure limit value known.

**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.

**Advisory OEL** : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m<sup>3</sup>, NIOSH (REL) TWA 5 mg/m<sup>3</sup>, STEL 10 mg/m<sup>3</sup>, ACGIH (TLV) TWA 5 mg/m<sup>3</sup> (highly refined)

**DNELs/DMELs**

Product/substance	Type	Exposure	Value	Population	Effects
Distillates (petroleum), hydrotreated light paraffinic	DNEL	Long term Inhalation	5.4 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	1.2 mg/m <sup>3</sup>	General population	Local
tris(methylphenyl) phosphate	DNEL	Long term Oral	0.05 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.08 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	0.46 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	1.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2.5 mg/kg bw/day	Workers	Systemic

**PNECs**

Product/ingredient name	Compartment Detail	Name	Method Detail
tris(methylphenyl) phosphate	Fresh water	0.001 mg/l	-
	Marine water	0.001 mg/l	-
	Fresh water sediment	2.05 mg/kg dwt	-
	Marine water sediment	0.205 mg/kg dwt	-
	Soil	1.01 mg/kg dwt	-
	Sewage Treatment Plant	100 mg/l	-
	Secondary Poisoning	0.65 mg/kg	-

**8.2 Exposure controls**

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.  
Hydrocarbon-proof gloves  
nitrile rubber  
Fluorinated rubber  
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.  
In case of prolonged contact with the product, it is recommended to wear gloves complying with EN 420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency
- Body protection** : 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.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator with combination filter for vapour/particulate Type A/P1  
Warning ! filters have a limited use duration The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses None under normal use conditions
- 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

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid. [Clear]
- Colour** : Not available.
- Odour** : Characteristic.
- Odour threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.

<b>Initial boiling point and boiling range</b>	: Not available.
<b>Flash point</b>	: Open cup: 254°C [ASTM D 92]
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Upper/lower flammability or explosive limits</b>	: Not available.
<b>Vapour pressure</b>	: Not available.
<b>Vapor pressure 37.8°C (100°F)</b>	: Not available.
<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: 0.858 to 0.878
<b>Solubility(ies)</b>	: Insoluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/ water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Kinematic (40°C): 1.35 cm <sup>2</sup> /s [ISO 3104]
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: Not applicable

## 9.2 Other information

**Solubility in water** : Insoluble

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<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.
<b>10.4 Conditions to avoid</b>	: No specific data.
<b>10.5 Incompatible materials</b>	: Strong oxidising agents
<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 toxicological effects

#### Acute toxicity



Product/substance	Result	Species	Dose	Exposure	Test
Distillates (petroleum), hydrotreated light paraffinic  tris(methylphenyl) phosphate	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
	LC50 Inhalation Vapour	Rat	11.1 mg/l	1 hours	-
	LD50 Dermal	Rabbit	>10000 mg/kg	-	-
	LD50 Oral	Rat	3 g/kg	-	-
	LD50 Oral	Rat	20000 mg/kg	-	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Acute toxicity estimates**

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
tris(methylphenyl) phosphate	3000	N/A	N/A	N/A	N/A

**Irritation/Corrosion**

Product/substance	Result	Species	Score	Exposure	Test
tris(methylphenyl) phosphate	Skin - Mild irritant	Rabbit	-	500 mg	-

**Conclusion/Summary**

**Skin** : Based on available data, the classification criteria are not met.

**Eyes** : Based on available data, the classification criteria are not met.

**Respiratory** : Based on available data, the classification criteria are not met.

**Sensitisation**

**Conclusion/Summary** :

**Skin** : Based on available data, the classification criteria are not met.

**Respiratory** : Based on available data, the classification criteria are not met.

**Mutagenicity**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Carcinogenicity**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Reproductive toxicity**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Teratogenicity**

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Specific target organ toxicity (single exposure)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Product/substance	Result
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1

**Information on likely routes of exposure** : Not available.

**Potential acute health effects**

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Ingestion** : No known significant effects or critical hazards.

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

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking  
**Ingestion** : No specific data.

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

**Short term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

**Conclusion/Summary** : Not available.

**General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Carcinogenicity** : During use in engines, contamination of oil with low levels of combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water.

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

**Teratogenicity** : 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.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/substance	Result	Species	Exposure	Test
Distillates (petroleum), hydrotreated light paraffinic	Acute EC50 >100 mg/l	Algae - Pseudokirchnerella subcapitata	48 hours	OECD 201
	Acute EC50 >10000 mg/l Chronic NOEL 10 mg/l Chronic NOEL >1000 mg/l	Daphnia - Daphnia magna Daphnia - Daphnia magna Fish - Oncorhynchus mykiss	48 hours 21 days 21 days	OECD 202 OECD 211 -
tris(methylphenyl) phosphate	Acute EC50 290 µg/l Fresh water	Algae - Stephanodiscus hantzschii - Exponential growth phase	96 hours	-
	Acute EC50 0.146 mg/l	Daphnia	48 hours	OECD 202
	Acute EC50 170 µg/l Fresh water	Fish - Gasterosteus aculeatus	96 hours	-
	Acute EC50 1000 mg/l	Micro-organism	3 hours	-
	Acute LC50 0.6 mg/l Chronic NOEC 0.1 mg/l	Fish Daphnia - Daphnia magna	96 hours 21 days	- -

### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

Product/substance	Aquatic half-life	Photolysis	Biodegradability
tris(methylphenyl) phosphate	-	-	Inherent

### 12.3 Bioaccumulative potential

Product/substance	LogK <sub>ow</sub>	BCF	Potential
tris(methylphenyl) phosphate	5.93	794.33	high

### 12.4 Mobility in soil

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

**Mobility** : Not available.

**Mobility in soil** : Given its physical and chemical characteristics, the product generally shows low soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.  
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. The following Waste Codes are only suggestions: 13 02 05\*

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**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.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ICAO/IATA
14.1 UN number	Not regulated.	9006	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tris (methylphenyl) phosphate)	-	-
14.3 Transport hazard class(es)	-	9	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	Yes.	No.	No.

#### Additional information

**ADN** : The product is only regulated as a dangerous good when transported in tank vessels.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** : 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.

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

**Other EU regulations**

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**Ozone depleting substances (1005/2009/EU)**

Not listed.

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

Not listed.

**Seveso Directive**

This product is not controlled under the Seveso Directive.

**National regulations**

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol (Annexes A, B, C, E)**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**Inventory list**

- Australia** : All components are listed or exempted.
- Canada** : Not determined.
- China** : All components are listed or exempted.
- Europe** : All components are listed or exempted.
- Japan** : **Japan inventory (ENCS)**: All components are listed or exempted.  
**Japan inventory (ISHL)**: Not determined.
- New Zealand** : Not determined.
- Philippines** : All components are listed or exempted.
- Republic of Korea** : All components are listed or exempted.
- Taiwan** : Not determined.
- Thailand** : Not determined.
- Turkey** : Not determined.
- United States** : All components are listed or exempted.
- Viet Nam** : Not determined.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

**SECTION 16: Other information**

✔ Indicates information that has changed from previously issued version.

- Value** :
- ATE = Acute Toxicity Estimate
  - CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
  - DMEL = Derived Minimal Effect Level
  - DNEL = Derived No Effect Level
  - EUH statement = CLP-specific Hazard statement
  - N/A = Not available
  - PBT = Persistent, Bioaccumulative and Toxic
  - PNEC = Predicted No Effect Concentration
  - RRN = REACH Registration Number
  - vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Aquatic Chronic 3, H412	Calculation method

**Full text of abbreviated H statements**



# AERO DM 15W-50

SDS no. 30983  
:

H304 H361fd  H400 H410 H412	May be fatal if swallowed and enters airways. Suspected of damaging fertility. Suspected of damaging the unborn child. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.
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## **Full text of classifications [CLP/GHS]**

Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Aquatic Chronic 3, H412 Asp. Tox. 1, H304 Repr. 2, H361fd	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 REPRODUCTIVE TOXICITY (Fertility and Unborn child) - Category 2
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**Date of revision** : 4/29/2021  
**Date of previous revision** : 4/29/2021  
**Version** : 2.06

### **Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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

Industrial

### Identification of the substance or mixture

**Product definition** : Mixture  
**Code** : 30983  
**Product name** : AERO DM 15W-50

### Section 1 - Title

**Short title of the exposure scenario** : Formulation additives, lubricants and greases - Industrial

**List of use descriptors** : **Identified use name:** Formulation additives, lubricants and greases - Industrial  
**Process Category:** PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC09, PROC15  
**Sector of end use:** SU03, SU10  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC02

**Environmental contributing scenarios** :

**Health Contributing scenarios** :

<b>Processes and activities covered by the exposure scenario</b>	: Industrial formulation of lubricant additives, lubricants and greases. Includes material transfers, mixing, large and small scale packing, sampling, maintenance.
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### Section 2 - Exposure controls

<b>Contributing scenario controlling environmental exposure for 1:</b> ATIEL-ATC SPERC 2.Ai-I.v1	
<b>Amounts used</b>	: Volume manufactured/imported (tonnes/year) : 1.00E+04 Fraction of EU tonnage used in region : 0.1 Fraction of Regional tonnage used locally : 0.1
<b>Frequency and duration of use</b>	: Emission days (days per year) : 300
<b>Environment factors not influenced by risk management</b>	: Local freshwater dilution factor : 10 Local marine water dilution factor : 100
<b>Other conditions affecting environmental exposure</b>	: Negligible wastewater emissions as process operates without water contact. Release fraction to air from process (after typical onsite RMMs consistent with EU Solvent Emissions Directive requirements) : 5.00E-05 Release fraction to wastewater from process (after typical onsite RMMs and before (municipal) sewage treatment plant): 2.00E-11 Release fraction to soil from process (after typical onsite RMMs): 0
<b>Technical conditions and measures at process level (source) to prevent release</b>	: 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>	: Treat air emission to provide a typical removal efficiency of (%) : 70 Prevent discharge of undissolved substance to or recover from onsite wastewater. User sites are assumed to be provided with oil/water separators and for waste water to be discharged via public sewer system.
<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>Date of issue/Date of revision</b> : 12/3/2020
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16/21



<b>Conditions and measures related to sewage treatment plant</b>	: Estimated substance removal from wastewater via domestic sewage treatment (%): (%) : 79 Assumed domestic sewage treatment plant flow (m <sup>3</sup> /d) : 2.00E+03 Maximum allowable site tonnage (M <sub>safe</sub> ) based on release following total wastewater treatment removal (kg/day) : 9 891 890
<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.

**Contributing scenario controlling worker exposure for 2:**

No exposure assessment presented for human health.

**Conditions and measures related to personal protection, hygiene and health evaluation****Section 3 - Exposure estimation and reference to its source**

**Website:** : Not applicable.

**Exposure estimation and reference to its source - Environment: 1:**

**Exposure assessment (environment):** : Used ECETOC TRA model..

**Exposure estimation and reference to its source** : Not available.

**Exposure estimation and reference to its source - Workers: 2:**

**Exposure assessment (human):** : The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

**Exposure estimation and reference to its source** : Not available.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<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/introduction">www.atiel.org/reach/introduction</a> .
<b>Health</b>	: Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. For further information see <a href="http://www.atiel.org/reach/introduction">www.atiel.org/reach/introduction</a> .

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

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

Industrial

### Identification of the substance or mixture

**Product definition** : Mixture  
**Code** : 30983  
**Product name** : AERO DM 15W-50

### Section 1 - Title

**Short title of the exposure scenario** : General use of lubricants and greases in vehicles or machinery - Industrial

**List of use descriptors** : **Identified use name:** General use of lubricants and greases in vehicles or machinery - Industrial  
**Process Category:** PROC01, PROC02, PROC08b, PROC09  
**Sector of end use:** SU03  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC04, ERC07

**Environmental contributing scenarios** :

**Health Contributing scenarios** :

<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 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1:

ATIEL-ATC SPERC 4.Bi.v1

**Amounts used** : Volume manufactured/imported (tonnes/year) : 2.63E+03

Fraction of EU tonnage used in region : 0.1  
Fraction of Regional tonnage used locally : 0.1

**Frequency and duration of use** : Emission days (days per year) : 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 from process (after typical onsite RMMs consistent with EU Solvent Emissions Directive requirements) : 5.00E-05  
Release fraction to wastewater from process (after typical onsite RMMs and before (municipal) sewage treatment plant): 2.00E-11  
Release fraction to soil from process (after typical onsite RMMs): 0

**Technical conditions and measures at process level (source) to prevent release** : Common practices vary across sites thus conservative process release estimates used.

**Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil** : Prevent discharge of undissolved substance to or recover from onsite wastewater. User sites are assumed to be provided with oil/water separators and for waste water to be discharged via public sewer system.

**Organisational measures to prevent/limit release from site** : Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.

**Date of issue/Date of revision** : 12/3/2020

18/21

<b>Conditions and measures related to sewage treatment plant</b>	: Estimated substance removal from wastewater via domestic sewage treatment (%): (%) : 79 Assumed domestic sewage treatment plant flow (m <sup>3</sup> /d) : 2.00E+03 Maximum allowable site tonnage (M <sub>Safe</sub> ) based on release following total wastewater treatment removal (kg/day) : 2 603 014
<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.

**Contributing scenario controlling worker exposure for 2:**

No exposure assessment presented for human health.

**Conditions and measures related to personal protection, hygiene and health evaluation****Section 3 - Exposure estimation and reference to its source**

**Website:** : Not applicable.

**Exposure estimation and reference to its source - Environment: 1:**

**Exposure assessment (environment):** : Used ECETOC TRA model..

**Exposure estimation and reference to its source** : Not available.

**Exposure estimation and reference to its source - Workers: 2:**

**Exposure assessment (human):** : The risk Management Measures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

**Exposure estimation and reference to its source** : Not available.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<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/introduction">www.atiel.org/reach/introduction</a> .
<b>Health</b>	: Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. For further information see <a href="http://www.atiel.org/reach/introduction">www.atiel.org/reach/introduction</a> .

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.

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

Professional

### Identification of the substance or mixture

**Product definition** : Mixture  
**Code** : 30983  
**Product name** : AERO DM 15W-50

### Section 1 - Title

**Short title of the exposure scenario** : General use of lubricants and greases in vehicles or machinery - Professional

**List of use descriptors** : **Identified use name:** General use of lubricants and greases in vehicles or machinery - Professional  
**Process Category:** PROC01, PROC02, PROC08a, PROC08b, PROC20  
**Sector of end use:** SU22  
**Subsequent service life relevant for that use:** No.  
**Environmental Release Category:** ERC09a, ERC09b

**Environmental contributing scenarios** :

**Health Contributing scenarios** :

<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 - Exposure controls

#### Contributing scenario controlling environmental exposure for 1:

ATIEL-ATC SPERC 9.Bp.v1

**Amounts used** : Volume manufactured/imported (tonnes/year) : 5.39E+03

Fraction of EU tonnage used in region : 0.1  
Fraction of Regional tonnage used locally : 0.1

**Frequency and duration of use** : Emission days (days per year) : 365

**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 from process (after typical onsite RMMs consistent with EU Solvent Emissions Directive requirements) : 5.00E-04  
Release fraction to wastewater from process (after typical onsite RMMs and before (municipal) sewage treatment plant): 5.00E-04  
Release fraction to soil from process (after typical onsite RMMs): 1.00E-03

**Technical conditions and measures at process level (source) to prevent release** : Common practices vary across sites thus conservative process release estimates used.

**Technical on-site conditions and measures to reduce or limit discharges, air emissions and releases to soil** : Prevent discharge of undissolved substance to or recover from onsite wastewater.

**Organisational measures to prevent/limit release from site** : Do not apply industrial sludge to natural soils. Sewage sludge should be incinerated, contained or reclaimed.

**Date of issue/Date of revision** : 12/3/2020

20/21

<b>Conditions and measures related to sewage treatment plant</b>	: Estimated substance removal from wastewater via domestic sewage treatment (%): (%) : 79 Assumed domestic sewage treatment plant flow (m <sup>3</sup> /d) : 2.00E+03 Maximum allowable site tonnage (M <sub>Safe</sub> ) based on release following total wastewater treatment removal (kg/day) : 2 018
<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.

**Contributing scenario controlling worker exposure for 2:**

No exposure assessment presented for human health.

**Conditions and measures related to personal protection, hygiene and health evaluation****Section 3 - Exposure estimation and reference to its source**

**Website:** : Not applicable.

**Exposure estimation and reference to its source - Environment: 1:**

**Exposure assessment (environment):** : Used ECETOC TRA model..

**Exposure estimation and reference to its source** : Not available.

**Exposure estimation and reference to its source - Workers: 2:**

**Exposure assessment (human):** : The risk Management Measures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

**Exposure estimation and reference to its source** : Not available.

**Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES**

<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/introduction">www.atiel.org/reach/introduction</a> .
<b>Health</b>	: Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. For further information see <a href="http://www.atiel.org/reach/introduction">www.atiel.org/reach/introduction</a> .

**Additional good practice advice beyond the REACH CSA**

<b>Environment</b>	: Not available.
<b>Health</b>	: Not available.