



SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

SDS # : 34190

AEROGEAR 823

Date of the previous version: not applicable

Revision Date: 2013-01-23

Version 2

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

1.1. Product identifier

Product name	AEROGEAR 823
Number	123
Pure substance/mixture	Mixture

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

Identified uses	Transmission fluid. Aviation.
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1.3. Details of the supplier of the safety data sheet

Supplier	TOTAL UK LIMITED 40 Clarendon Road Watford. Hertfordshire. WD17 1TQ UNITED KINGDOM Tel: +44 (0)1923 427700 Fax: +44 (0)1923 427701
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For further information, please contact:

Contact Point	Specific Product Related Info : 01977 636200
E-mail Address	rm.gb-msds@total.co.uk

1.4. Emergency telephone number

+33 1 49 00 00 49 (24h/24, 7d/7)
Total UK - 01923 427700
NHS Direct: 0845 46 47 / Textphone: 0845 606 46 47

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture**REGULATION (EC) No 1272/2008**

For the full text of the H-Statements mentioned in this Section, see Section 2.2.

DIRECTIVE 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16.



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The substance/mixture is non-dangerous in accordance with Directive(s) 67/548/EEC with amendments and/or 1999/45/EC with amendments

Symbol(s)
Not Classified

2.2. Label elements

Labelled according to Directive 1999/45/EC

R-phrases(s)
None

S-phrases(s)
None
Contains Long chain alkyl dithio thiadiazole. May produce an allergic reaction.

2.3. Other hazards

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

Properties Affecting Health May produce an allergic reaction.

Environmental properties Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	EC-No	REACH Registration Number	CAS-No	Weight %	Classification (Dir. 67/548)	GHS Classification
2,6-di-tert-butylphenol	204-884-0	01-2119490822-33	128-39-2	<0.5	Xi;R38 N;R50-53	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Skin Irrit. 2 (H315)

Additional information Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES4.1. Description of first aid measures



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General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water and seek medical advice.
Skin contact	Remove contaminated clothing and shoes. Wash off immediately with plenty of water. Wash contaminated clothing before reuse. Wash off with soap and water.
Inhalation	Move to fresh air. Inhalation of high concentrations of vapour or aerosols may cause irritation of the upper respiratory tract.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting - seek medical advice.

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

Eye contact	Not classified.
Skin contact	Not classified. May produce an allergic reaction.
Inhalation	Inhalation of vapours in high concentration may cause irritation of respiratory system.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media	Foam. Carbon dioxide (CO ₂). ABC powder.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Special hazard	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.
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5.3. Precautions for fire-fighters

Special protective equipment for fire-fighters	Wear self-contained breathing apparatus and protective suit.
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Other information Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General Information Contaminated surfaces will be extremely slippery. Do not touch or walk through spilled material.

6.2. Environmental precautions

General Information Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up Keep in suitable, closed containers for disposal. Dam up. Soak up with inert absorbent material. Contain spillage, and then collect with non-combustable absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

Personal protective equipment See Section 8 for more detail.

Waste treatment See section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Use only in well-ventilated areas. When using, do not eat, drink or smoke. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. For personal protection see section 8.

Hygiene measures Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and at the end of workday. Do not use abrasives, solvents or fuels. Avoid breathing vapours, mist or gas. Do not dry hands with rags that have been contaminated with product. Wash hands with water as a precaution. Do not wash off with: Fuel. Solvent. Abrasive. Avoid extended and repeated contact with the skin as this may cause skin disorders, which may also be aggravated by minor injuries or by contact with soiled clothing. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not put product contaminated rags into workwear pockets.



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7.2. Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

Preferably keep in the original container. Otherwise, reproduce all the statutory information from the labels onto the new container. Protect from frost, heat and sunlight. Protect from moisture. Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Store in original container. Keep in properly labelled containers.

Materials to avoid

Strong oxidising agents.

Packaging material

Use only containers, seals, pipes, etc... made in a material suitable for use with aromatic hydrocarbons.

7.3. Specific use(s)**Specific use(s)**

No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION8.1. Control parametres**Exposure limits**oil mist : 10mg/m³, for 15 minutes oil mist : 5mg/m³, for 8 hours**Legend**

See section 16

Biological standards

not applicable

DNEL Worker (Industrial/Professional)

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
2,6-di-tert-butylphenol 128-39-2			2.77 mg/kg bw/day Dermal 19.6 mg/m ³ Inhalation	

DNEL Consumer

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
2,6-di-tert-butylphenol 128-39-2			1.67 mg/kg bw/day Oral 5.8 mg/m ³ Inhalation	

Predicted No Effect Concentration (PNEC)

Chemical Name	Water	Sediment	Soil	Air	STP	Oral



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2,6-di-tert-butylphenol 128-39-2	0.45 µg/l fw 0.045 µg/l mw 4.5 µg/l or	0.196 mg/kg dw fw 0.0196 mg/kg dw mw	38.9 µg/kg dw		10 mg/l	
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8.2. Exposure controls**Occupational Exposure Controls****Engineering measures**

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Personal protective equipment**General Information**

Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

Eye protection

If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection

Do not wear rings, watches or anything similar which can retain the product and may cause a skin reaction. Long sleeved clothing. Wear suitable protective clothing. Protective shoes or boots. Extended and repeated contacts with skin can cause skin ailments which may be aggravated by minor injuries or contact with soiled clothing.

Hand protection

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. Hydrocarbon-proof gloves. Nitrile rubber. Fluorinated rubber. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves.

Environmental exposure controls**General Information**

The product should not be allowed to enter drains, water courses or the soil.

9. PHYSICAL AND CHEMICAL PROPERTIES9.1. Information on basic physical and chemical properties**Appearance**

Clear
to

Colour

slightly cloudy
yellow to amber

Physical state @20°C

Liquid



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<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
Odour		characteristic	
pH		not applicable	
Boiling point/boiling range		No information available	
Flash point	> 222 °C > 432 °F		Open cup Open cup.
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
Vapour pressure		No information available	
Vapour density		No information available	
Density	890 kg/m ³	@ 15 °C	ISO 12185
Water solubility		No information available	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition Temperature		not applicable	
Viscosity, kinematic	63 mm ² /s	@ 40 °C	ISO 3104
Explosive properties	Not explosive		
Oxidising Properties	no data available		
Possibility of hazardous reactions	not applicable		
<u>9.2. Other information</u>			

10. STABILITY AND REACTIVITY

10.1. Reactivity10.2. Chemical stability

Stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions None under normal processing.

10.4. Conditions to Avoid

Conditions to Avoid Heat (temperatures above flash point), sparks, ignition points, flames, static electricity. Heat, flames and sparks. Take precautionary measures against static discharges. Strong oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous Decomposition Products



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Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

11. TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Acute toxicity Local effects Product Information**

- Skin contact** . Not classified. May produce an allergic reaction.
- Eye contact** . Not classified.
- Inhalation** . Inhalation of vapours in high concentration may cause irritation of respiratory system.
- Ingestion** . Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,6-di-tert-butylphenol	> 5000 mg/kg (Rat)	LD50 > 5000 mg/kg (Rabbit)	

Sensitisation

Sensitisation Contains sensitizer(s). May produce an allergic reaction.

Specific effects

Carcinogenicity Contains no ingredient listed as a carcinogen.
Mutagenicity Contains no ingredient listed as a mutagen.
Reproductive toxicity This product does not present any known or suspected reproductive hazards.
Repeated Dose Toxicity

Subchronic Toxicity No information available.

Target Organ Effects (STOT)

Target Organ Effects (STOT) No information available.

Other information

Other adverse effects Characteristic skin lesions (oil blisters) may develop following prolonged and repeated exposures (contact with contaminated clothing).

12. ECOLOGICAL INFORMATION**12.1. Toxicity**

Not classified.



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Acute aquatic toxicity - Product Information

No information available.

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
2,6-di-tert-butylphenol 128-39-2	EC50 (72h) 1.2 mg/l	EC50 (48h) = 0.45 mg/L Daphnia magna	LC50(96h) >1.4 mg/l	

Chronic aquatic toxicity - Product Information

No information available.

Chronic aquatic toxicity - Component Information

No information available.

Effects on terrestrial organisms

No information available.

12.2. Persistence and Degradability**General Information**

No information available.

12.3. Bioaccumulative potential**Product Information**

No information available.

logPow

No information available

Component Information

Chemical Name	log Pow
2,6-di-tert-butylphenol - 128-39-2	4.5

12.4. Mobility in soil**Soil**

Given its physical and chemical characteristics, the product generally shows low soil mobility.

Air

Loss by evaporation is limited.

Water

The product is insoluble and floats on water.

12.5. Results of PBT and vPvB assessment**PBT and vPvB assessment**

No information available.



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12.6. Other adverse effects**13. DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods

Waste from residues / unused products	Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. After use, this oil must be sent to a licensed waste oil facility. Incorrect disposal of used oil poses a risk to the environment. Mixture with other waste types such as solvents, brake- and cooling liquids is forbidden. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
EWC Waste Disposal No	The following Waste Codes are only suggestions: 13 02 05.
Other information	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.

14. TRANSPORT INFORMATION

<u>ADR/RID</u>	not regulated
<u>IMDG/IMO</u>	not regulated
<u>ICAO/IATA</u>	not regulated
<u>ADN</u>	not regulated

15. REGULATORY INFORMATION15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

International Inventories

EINECS/ELINCS	-
TSCA	-



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DSL -
 ENCS -
 IECS -
 KECL -
 PICCS -
 AICS -
 NZIoC -

Legend**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**ENCS** - Japan Existing and New Chemical Substances**IECS** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**NZIoC** - New Zealand Inventory of Chemicals

Further information

15.2. Chemical Safety Assessment15.3. National regulatory information**The United Kingdom**

- Avoid exceeding occupational exposure limits (see section 8).

Ireland

- Avoid exceeding occupational exposure limits (see section 8).

16. OTHER INFORMATION**Full text of R-phrases referred to under sections 2 and 3**

R38 - Irritating to skin

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Abbreviations, acronyms

Legend Section 8

+

Sensitiser

*

Skin designation



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**	Hazard Designation	C:	Carcinogen
M:	Mutagen	R:	Toxic to reproduction

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Revision Note *** Indicates updated section.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of Safety Data Sheet