



SAFETY DATA SHEET

DURAD® 125 AVIATION

Version: 1.0

Revision Date: 03/31/2015

Print Date: 01/10/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: DURAD® 125 AVIATION

Product Use Description: Fire retardant
Lubricant
Additive

Company: Chemtura Corporation
199 Benson Road
Middlebury, CT
06749
United States of America

Telephone: (US) +1 866-430-2775

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
:
Chemtura Corporation Emergency Response: CHEMTURA : 800-292-5898

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Prepared by Product Safety Department
(US) +1 866-430-2775

MSDSRequest@chemtura.com

Recommended use of the chemical and restrictions on use

Recommended use : Fire retardant, Lubricant, Additive

Restrictions on use : Industrial use, Professional use, Consumer use

SECTION 2. HAZARDS IDENTIFICATION

Form	liquid
Colour	colourless
Odour	odourless

GHS Classification

Reproductive toxicity : Category 2
Acute aquatic toxicity : Category 1
Chronic aquatic toxicity : Category 1

GHS Label element



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Signal word : **Warning**

Hazard pictograms :



Hazard statements : H361 Suspected of damaging fertility or the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

Other hazards : None

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
P281 Use personal protective equipment as required.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P391 Collect spillage.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Self-ignitable : No data available

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
tris(methylphenyl) phosphate	1330-78-5	>= 90 - <= 100 %



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SECTION 4. FIRST AID MEASURES

- | | |
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| If inhaled | : Remove to fresh air.
Obtain medical attention. |
| In case of skin contact | : Take off contaminated clothing and shoes immediately.
Wash off with soap and water.
Call a physician if irritation develops or persists. |
| In case of eye contact | : Rinse immediately with plenty of water, also under the eyelids,
for at least 15 minutes.
Obtain medical attention. |
| If swallowed | : If conscious, make the victim drink the following:
Drink 1 or 2 glasses of water.
Obtain medical attention. |
| Most important symptoms
and effects, both acute and
delayed | : Symptoms may be delayed.
toxic effects for reproduction |
| Notes to physician | : The first aid procedure should be established in consultation
with the doctor responsible for industrial medicine. |

SECTION 5. FIREFIGHTING MEASURES

- | | |
|--|--|
| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local
circumstances and the surrounding environment. |
| Specific hazards during
firefighting | : Burning produces irritant fumes.
Exposure to decomposition products may be a hazard to
health. |
| Specific extinguishing
methods | : Use water spray to cool unopened containers. |
| Special protective equipment
for firefighters | : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | |
|---|--|
| Personal precautions,
protective equipment and
emergency procedures | : Use personal protective equipment. |
| Environmental precautions | : Should not be released into the environment. |



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Methods and materials for containment and cleaning up : Remove all sources of ignition. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Shovel into suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.
Use only with adequate ventilation.
Keep away from heat and sources of ignition.
Avoid contact with skin, eyes and clothing.
Wear personal protective equipment.
Avoid formation of aerosol.
Do not breathe vapours or spray mist.

Conditions for safe storage : Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep away from flames and sparks.

Materials to avoid : None known.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Engineering measures : Use local ventilation to keep levels below established threshold values.
Avoid formation of dust and aerosols.
Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapours.
In case of inadequate ventilation wear respiratory protection.

Personal protective equipment

Respiratory protection : Wear a NIOSH/MSHA approved organic cartridge respirator if misting or vapor occurs, or there is potential for airborne exposures to exceed established threshold values.
A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Wear a NIOSH/MSHA approved self-contained breathing apparatus in emergency situations.

Hand protection
Remarks : butyl-rubber Nitrile rubber

Eye protection : Tightly fitting safety goggles

Skin and body protection : impervious clothing

Hygiene measures : Wash thoroughly after handling.



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Wash contaminated clothing before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: colourless
Odor	: odourless
Odour Threshold	: No data available
pH	: No data available
Freezing point	: < -40 °C
Boiling point/boiling range	: 241 - 255 °C
Evaporation rate	: No data available
Flash point	: 225 °C Method: ASTM D 93
Auto-flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 2.8 hPa (20 °C) 3.7 hPa (25 °C)
Relative vapour density	: No data available
Relative density	: 1.16 - 1.18 (20 °C)
<u>Solubility(ies)</u>	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: Pow: 5.93
Auto-ignition temperature	: 607 °CAuto-flammability
Thermal decomposition	: > 300 °C
Viscosity	
Viscosity, dynamic	: 70 mPa.s (25 °C)
Viscosity, kinematic	: No data available



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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: None known.
Hazardous decomposition products	: Carbon oxides Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Product)	: LD50: > 5,001 mg/kg Species: Rat
Acute inhalation toxicity (Product)	: LC50: > 5.2 mg/l Exposure time: 4 h Species: Rat
Acute dermal toxicity (Product)	: LD50: > 10,000 mg/kg Species: Rabbit
Skin irritation (Product)	: Species: Rabbit Result: No skin irritation Method: Draize Test Exposure time: 24 h
Eye irritation (Product)	: Species: Rabbit Result: No eye irritation
Sensitisation (Product)	: Result: Does not cause skin sensitisation.
Aspiration toxicity (Product)	: No aspiration toxicity classification



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CMR effects

tris(methylphenyl) phosphate (Component) : Carcinogenicity: Animal testing did not show any carcinogenic effects.
Mutagenicity: In vitro tests did not show mutagenic effects
Teratogenicity: Did not show teratogenic effects in animal experiments.
Reproductive toxicity: Suspected of damaging fertility or the unborn child.

Further information (Product) : Acute Health Hazard
Chronic Health Hazard

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish (Product) : LC50: 0.75 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

(Product) : LC50: > 100 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)

(Product) : LC50: 0.6 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Product) : EC50: 0.146 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202

(Product) : EC50: 0.27 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Toxicity to bacteria tris(methylphenyl) phosphate (Component) : EC50: > 100 mg/l
Exposure time: 3 h
Species: activated sludge
Respiration inhibition

Elimination information (persistence and degradability)

Bioaccumulation (Product) : Remarks:
No data available



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Mobility (Product) : Remarks:
No data available

Biodegradability (Product) : Result: According to the results of tests of biodegradability this product is not readily biodegradable.
24 %

Further information on ecology

Ecotoxicology Assessment

Results of PBT assessment (Product)

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information (Product) : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Avoid release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of wastes in an approved waste disposal facility.
The product should not be allowed to enter drains, water courses or the soil.
In accordance with local and national regulations.
Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

DOT

UN number : 3082
Description of the goods : Environmentally hazardous substances, liquid, n.o.s.
(tris(methylphenyl) phosphate)
Class : 9
Packing group : III
Environmentally hazardous : yes
tris(methylphenyl) phosphate



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IATA

UN number : 3082
Description of the goods : Environmentally hazardous substance, liquid, n.o.s.
(tris(methylphenyl) phosphate)
Class : 9
Packing group : III
Environmentally hazardous : no

IMDG

UN number : 3082
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(tris(methylphenyl) phosphate)
Class : 9
Packing group : III
EmS Number 1 : F-A
EmS Number 2 : S-F
Marine pollutant : yes
tris(methylphenyl) phosphate

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Chronic Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

US.TSCA

On TSCA Inventory

DSL

All components of this product are on the Canadian DSL.

AICS

On the inventory, or in compliance with the inventory

NZIoC

On the inventory, or in compliance with the inventory

ENCS

On the inventory, or in compliance with the inventory



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KECI
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On the inventory, or in compliance with the inventory
On the inventory, or in compliance with the inventory
On the inventory, or in compliance with the inventory
On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Further information

Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
<u>Mexico:</u>		+52 555 004 8763

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