



SAFETY DATA SHEET

DURAD® 310M

Version: 1.0

Revision Date: 03/31/2015

Print Date: 04/22/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: DURAD® 310M

Product Use Description: 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 : Lubricant, Additive

Restrictions on use : Restricted to professional users.

SECTION 2. HAZARDS IDENTIFICATION

Form	liquid
Colour	colourless
Odour	odourless

GHS Classification

Reproductive toxicity (Oral) : Category 2
Specific target organ toxicity - repeated exposure : Category 2
Chronic aquatic toxicity : Category 4

GHS Label element



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Signal word : **Warning**

Hazard pictograms : 

Hazard statements : H361 Suspected of damaging fertility or the unborn child if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H413 May cause long lasting harmful effects to aquatic life.

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.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P281 Use personal protective equipment as required.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
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.

Environmental Effects

Environmental Effects : May cause long-term adverse effects in the aquatic environment.



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Phenol, isopropylated, phosphate (3:1)	68937-41-7	>= 90 - <= 100 %
Alcohols, C8-16, reaction products with phosphorus oxide (P2O5)		>= 1 - < 5 %

SECTION 4. FIRST AID MEASURES

- If inhaled : Remove to fresh air.
Get medical attention.
- In case of skin contact : Remove/Take off immediately all contaminated clothing.
Wash skin thoroughly with soap and water for at least 15 minutes.
If skin irritation occurs: Get medical advice/ attention.
Wash contaminated clothing before re-use.
- In case of eye contact : Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- If swallowed : Do NOT induce vomiting.
If conscious, make the victim drink the following:
Drink 1 or 2 glasses of water.
Get medical attention immediately.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : toxic effects for reproduction
- Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : All conventional media are suitable.
- Specific hazards during firefighting : Burning produces noxious and toxic fumes.
Thermal decomposition can lead to release of irritating gases and vapours.
- Specific extinguishing methods : In the event of fire, wear self-contained breathing apparatus.
Wear personal protective equipment.



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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid contact with skin and eyes.
Wear suitable protective clothing, gloves and eye/face protection.
Avoid breathing vapours, mist or gas.
- Environmental precautions : Avoid release to the environment.
- Methods and materials for containment and cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Large spills should be collected mechanically (remove by pumping) for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Handle and open container with care.
Avoid inhalation, ingestion and contact with skin and eyes.
Wear personal protective equipment.
Use only in area provided with appropriate exhaust ventilation.
Smoking, eating and drinking should be prohibited in the application area.
Keep container closed when not in use.
- Conditions for safe storage : Keep in a dry, cool and well-ventilated place.
Keep container tightly closed.
- Materials to avoid : Strong bases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
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- Engineering measures** : Ensure that extracted air cannot be returned to the workplace through the ventilation system.
Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

- Respiratory protection : 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.



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	Wear a NIOSH/MSHA approved self-contained breathing apparatus in emergency situations.
Hand protection	
Remarks	: Impervious butyl rubber gloves Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	: Safety goggles or Face-shield
Skin and body protection	: impervious clothing Long sleeved clothing Remove and wash contaminated clothing before re-use. To protect against splashes from pouring: Chemical resistant apron Rubber or plastic boots
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes and clothing. Do not inhale aerosol. Ensure adequate ventilation, especially in confined areas. When using do not eat, drink or smoke. Wash thoroughly after handling. Keep working clothes separately. Remove and wash contaminated clothing before re-use. Contaminated work clothing should not be allowed out of the workplace.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: colourless
Odor	: odourless
Odour Threshold	: No data available
pH	: No data available
	: Not applicable
Boiling point/boiling range	: > 300 °C (1,013.250164 hPa)
Evaporation rate	: No data available
Flash point	: 200 °C
Auto-flammability	: No data available



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Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 0.035 hPa (150 °C)
Relative vapour density	: > 1
Relative density	: 1.00 - 1.13 (20 °C)
Density	: No data available
<u>Solubility(ies)</u>	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: 565 °CAuto-flammability
Thermal decomposition	: > 300 °C
Viscosity	
Viscosity, dynamic	: 57 - 66 mPa.s (40 °C)
Viscosity, kinematic	: No data available

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	: Will not occur.
Conditions to avoid	: Extremes of temperature and direct sunlight. Exposure to moisture. Contamination
Incompatible materials	: Strong bases
Hazardous decomposition products	: Phenol.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Product)	: LD50: > 5,000 mg/kg
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Species: Rat

Acute dermal toxicity (Product) : LD50: > 2,000 mg/kg
Species: Rabbit

Skin irritation (Product) : Species: Rabbit
Result: No skin irritation

Eye irritation (Product) : Species: Rabbit
Result: No eye irritation
Method: Draize Test

Aspiration toxicity (Product) : No aspiration toxicity classification

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish (Product) : > 1,000 mg/l
Exposure time: 96 h
Species: Fish

Toxicity to daphnia and other aquatic invertebrates (Product) : > 1,000 mg/l
Species: Daphnia magna (Water flea)
semi-static test

Toxicity to algae (Product) :
(Product) : EL50: > 1,000 mg/l
Exposure time: 72 h
Species: Algae

Toxicity to bacteria (Product) : EC50: > 1,000 mg/l
Species: Bacteria

Elimination information (persistence and degradability)

Bioaccumulation (Product) : Remarks:
No data available



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Mobility (Product) : Remarks:
No data available

Biodegradability (Product) : Result: Not readily biodegradable.
48 %

Further information on ecology

Ecotoxicology Assessment

Results of PBT assessment (Product)

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information (Product) : Avoid release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.
Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

ADR

Not dangerous goods

RID

Not dangerous goods

MERCOSUR

Not dangerous goods

DOT

Not dangerous goods

IATA

Not dangerous goods



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IMDG

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
phenol	108-95-2	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
phenol	108-95-2	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : Chronic Health Hazard

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:
phenol 108-95-2

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
KECI	On the inventory, or in compliance with the inventory
PICCS	Not in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION



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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.