



# SAFETY DATA SHEET

## DURAD® 220

Version: 1.0

Revision Date: 03/31/2015

Print Date: 04/22/2015

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: DURAD® 220

Product Use Description: This substance is restricted to the following uses:  
Fire retardant  
Additive  
Adhesives and/or sealants  
Paint  
Heat transfer agents  
Photosensitive agents and other photo-chemicals  
Metalworking-fluid preservatives  
Lubricants and lubricant additives  
Surface treatment

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 : This substance is restricted to the following uses:, Fire retardant, Additive, Adhesives and/or sealants, Paint, Heat transfer agents, Photosensitive agents and other photo-chemicals, Metalworking-fluid preservatives, Lubricants and lubricant additives, Surface treatment

Restrictions on use : To be used only where there is a recognised need. Do not exceed the appropriate dose rates.

### SECTION 2. HAZARDS IDENTIFICATION

Form

oily liquid



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Colour	colourless
Odour	odourless

### GHS Classification

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

### GHS Label element

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.  
H411 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.  
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.  
P391 Collect spillage.  
**Storage:**  
P405 Store locked up.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

### 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



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### NTP

equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
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

: Toxic to aquatic organisms.  
May cause long-term adverse effects in the aquatic environment.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%]	68937-41-7	>= 90 - <= 100 %

## SECTION 4. FIRST AID MEASURES

- If inhaled : Move to fresh air.  
Give oxygen or artificial respiration if needed.  
Obtain medical attention.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off with warm water and soap.  
If skin irritation occurs: Get medical advice/ attention.  
Wash contaminated clothing before re-use.
- In case of eye contact : Rinse thoroughly with plenty of water, also under the eyelids.  
If eye irritation persists, consult a specialist.
- If swallowed : Do NOT induce vomiting.  
If conscious, make the victim drink the following:  
Drink 1 or 2 glasses of water.  
Obtain medical attention.  
Never give anything by mouth to an unconscious person.

## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : All conventional media are suitable.
- Specific hazards during firefighting : Burning produces noxious and toxic fumes.
- Specific extinguishing : Cool containers/tanks with water spray.



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methods : Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Full protective flameproof clothing

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection.

Environmental precautions : Avoid release to the environment.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Shovel into suitable container for disposal. Ventilate the area.

### SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Handle and open container with care. Heat only in areas with appropriate exhaust ventilation. Avoid inhalation, ingestion and contact with skin and eyes. Do not breathe vapours or spray mist. Wear personal protective equipment. Keep container closed when not in use.

Conditions for safe storage : Keep containers tightly closed in a dry, cool and well-ventilated place. Keep only in the original container.

Materials to avoid : None known.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Engineering measures : Use mechanical ventilation for general area control. 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 : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.



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	In the case of vapour formation use a respirator with an approved filter. Respirator with a vapour filter (EN 141)
Eye protection	: Safety goggles or Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	: Long sleeved clothing impervious clothing To protect against splashes from pouring: Chemical resistant apron Rubber or plastic boots Remove and wash contaminated clothing before re-use.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. When using do not eat, drink or smoke. Wash thoroughly after handling. Keep working clothes separately. Wash contaminated clothing before reuse.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: oily liquid
Color	: colourless
Odor	: odourless
Odour Threshold	: No data available
pH	: No data available
Freezing point	: < -40 °C
Boiling point/boiling range	: 220 - 270 °C (5.332 hPa)
Evaporation rate	: No data available
Flash point	: 257 °C Method: ASTM D 93
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 0.035 hPa (150 °C)
Relative vapour density	: > 1



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Relative density : 1.127 - 1.142 (20 °C)

### Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : soluble  
Solvent: Organic solvents

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

### Viscosity

Viscosity, dynamic : No data available

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 : None known.

Incompatible materials : None known.

Hazardous decomposition products : Oxides of phosphorus  
Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide

## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute oral toxicity

Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%]  
(Component) : LD50: > 5,000 mg/kg  
Species: Rat

### Acute inhalation toxicity

Phenol, isopropylated, phosphate (3:1) [Triphenyl phosphate > 5%]  
(Component) : LC50: > 200 mg/l  
Species: Rat



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Acute dermal toxicity  
Phenol, isopropylated,  
phosphate (3:1) [Triphenyl  
phosphate > 5%]  
(Component)

: LD50: > 10,000 mg/kg  
Species: Rabbit

Skin irritation (Product)

: Result: No skin irritation

Eye irritation (Product)

: Result: No eye irritation

Aspiration toxicity (Product)

: No aspiration toxicity classification

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

Toxicity to fish (Product)

: Remarks:  
Information given is based on data obtained from similar substances.

Toxicity to daphnia and other  
aquatic invertebrates  
(Product)

: Remarks:  
Information given is based on data obtained from similar substances.

### Elimination information (persistence and degradability)

Bioaccumulation (Product)

: Remarks:  
No data available

Mobility (Product)

: Remarks:  
No data available

Biodegradability (Product)

: Result: According to the results of tests of biodegradability this product is not readily biodegradable.

### Further information on ecology

#### Ecotoxicology Assessment

Results of PBT assessment (Product)

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

## SECTION 13. DISPOSAL CONSIDERATIONS



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### Disposal methods

Waste from residues : Dispose of waste material in compliance with all federal, state, and local regulations.  
Dispose of wastes in an approved waste disposal facility.  
Do not contaminate ponds, waterways or ditches with chemical or used container.

## SECTION 14. TRANSPORT INFORMATION

### DOT

UN number : 3082  
Description of the goods : Environmentally hazardous substances, liquid, n.o.s.  
(Phenol, isopropylated phosphate (3:1) [Triphenyl phosphate > 5%])  
Class : 9  
Packing group : III  
Environmentally hazardous : yes  
Phenol, isopropylated phosphate (3:1) [Triphenyl phosphate > 5%]

### IATA

UN number : 3082  
Description of the goods : Environmentally hazardous substance, liquid, n.o.s.  
(Phenol, isopropylated phosphate (3:1) [Triphenyl phosphate > 5%])  
Class : 9  
Packing group : III  
Environmentally hazardous : no

### IMDG

UN number : 3082  
Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Phenol, isopropylated phosphate (3:1) [Triphenyl phosphate > 5%])  
Class : 9  
Packing group : III  
EmS Number 1 : F-A  
EmS Number 2 : S-F  
Marine pollutant : yes  
Phenol, isopropylated phosphate (3:1) [Triphenyl phosphate > 5%]





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### 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** : 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

**KECI**

On the inventory, or in compliance with the inventory

**PICCS**

On the inventory, or in compliance with the inventory

**IECSC**

On the inventory, or in compliance with the inventory

### SECTION 16. OTHER INFORMATION

#### Further information

#### Other Emergency Phone Number

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

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