



SAFETY DATA SHEET

NAUGALUBE® 438L

Version: 1.0

Revision Date: 04/15/2015

Print Date: 04/22/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: NAUGALUBE® 438L

Product Use Description: Antioxidant

Synonyms: Substitued amine

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 : Antioxidant

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

SECTION 2. HAZARDS IDENTIFICATION

Form	liquid
Colour	brown
Odour	characteristic

GHS Classification

Acute aquatic toxicity : Category 3

Chronic aquatic toxicity : Category 4

GHS Label element



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Hazard statements : H402 Harmful to aquatic life.
H413 May cause long lasting harmful effects to aquatic life.

Other hazards : None

Precautionary statements : **Prevention:**
P273 Avoid release to the environment.
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 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 : Harmful to aquatic organisms.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
bis(nonylphenyl)amine	36878-20-3	>= 70 - < 90 %
diphenylamine	122-39-4	>= 0.1 - < 1 %

SECTION 4. FIRST AID MEASURES

If inhaled : Remove to fresh air.
Obtain medical attention.

In case of skin contact : Remove contaminated clothing and shoes.
Wash off with warm water and soap.
If symptoms persist, call a physician.

In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
If symptoms persist, call a physician.

If swallowed : Do NOT induce vomiting.
Rinse mouth with water.
Obtain medical attention.



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Most important symptoms and effects, both acute and delayed : None known.
No information available.
Notes to physician : No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Extinguishing media - large fires
Alcohol-resistant foam
(on small fires)
Carbon dioxide (CO₂)
Dry chemical
Water spray

Unsuitable extinguishing media : Water spray jet

Specific hazards during firefighting : May form explosive dust-air mixture.

Specific extinguishing 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
Complete suit protecting against chemicals

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.
Avoid contact with skin and eyes.

Environmental precautions : Do not allow material to contaminate ground water system.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid contact with skin, eyes and clothing.
Do not smoke.
Avoid inhalation of vapour or mist.



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Use with adequate ventilation.
Wash thoroughly after handling.

Conditions for safe storage : Keep in a dry, cool place.

Materials to avoid : Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
diphenylamine	122-39-4	TWA	10 mg/m3	ACGIH
		TWA	10 mg/m3	OSHA P0
		TWA	10 mg/m3	NIOSH REL

Engineering measures : Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection
Remarks : Impervious butyl rubber gloves

Eye protection : Safety glasses with side-shields

Skin and body protection : Lightweight protective clothing

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : brown

Odor : characteristic

Odour Threshold : No data available

pH : No data available

Solidification point : -43 °C

Boiling point/boiling range : > 300 °C (989 hPa)

Evaporation rate : No data available

Flash point : > 200 °C



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(999 hPa)

Auto-flammability : 440 °C1,030 hPa

Upper explosion limit : Upper flammability limit
No data available

Lower explosion limit : lower flammability limit
No data available

Vapour pressure : < 0.01 hPa (25 °C)

Relative vapour density : No data available

Relative density : 0.95

Density : 0.97 g/cm³ (20 °C)

Solubility(ies)

Water solubility : < 0.00001 g/l (20 °C)

No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : log Pow: > 7.6estimated

Auto-ignition temperature : No data available

Viscosity

Viscosity, dynamic : 17 mPa.s

Viscosity, kinematic : 17.9 mm²/s

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.

Exposure to moisture.
Exposure to water vapour.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition : Carbon oxides



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products

Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

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

Acute inhalation toxicity (Product) : Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Method: Calculation method

Acute dermal toxicity (Product) : LD50: > 2,000 mg/kg
Remarks: Information given is based on data obtained from similar substances.

Skin irritation (Product) : Remarks: Information given is based on data obtained from similar substances.

Eye irritation bis(nonylphenyl)amine (Component) : Species: Rabbit
Result: No eye irritation

diphenylamine (Component) : Species: Rabbit
Result: Mild eye irritation

Sensitisation (Product) : Species: Guinea pig
Result: negative
Remarks: Information given is based on data obtained from similar substances.

Repeated dose toxicity (Product) : Species: Rat, male and female
Application Route: Oral
NOEL: 25 mg/kg
Information given is based on data obtained from similar substances.

Aspiration toxicity (Product) : No aspiration toxicity classification

CMR effects diphenylamine (Component) : Carcinogenicity: Not classifiable as a human carcinogen.
Mutagenicity: Animal testing did not show any mutagenic effects.
Teratogenicity: No toxicity to reproduction



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Reproductive toxicity: No toxicity to reproduction

Further information (Product) : Based on available data, the classification criteria are not met.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish (Product) : Remarks:
Information refers to the main component.

Toxicity to daphnia and other aquatic invertebrates (Product) : Remarks:
Information refers to the main component.

Toxicity to fish (Chronic toxicity) (Product) : Remarks:
No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) (Product) : Remarks:
No toxicity at the limit of solubility

Elimination information (persistence and degradability)

Bioaccumulation (Product) (Product) :
: Remarks:
No data available

Mobility (Product) : Remarks:
No data available

Biodegradability (Product) : Remarks:
Not readily biodegradable.

Further information on ecology

Ecotoxicology Assessment

Chronic aquatic toxicity (Product) : May cause long lasting harmful effects to aquatic life.

Results of PBT assessment (Product)
No data available

Additional ecological information (Product) : May cause long-term adverse effects in the aquatic environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods



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Waste from residues : Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

ADR

Not dangerous goods

RID

Not dangerous goods

MERCOSUR

Not dangerous goods

DOT

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

Additional advice: Not classified as dangerous in the meaning of transport regulations.

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 : No SARA Hazards



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- 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.

US State Regulations

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 Not 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

<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.