

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: NAUGALUBE® AMS

Product Use Description: This substance is restricted to the following uses:
Lubricants and lubricant additives
Chemical intermediate

Synonyms: Di- α -Methylstyryl Diphenylamine

Company: LANXESS Solutions US Inc.
2 Armstrong Road
Shelton, Ct
06484
United States of America (USA)

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

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300
:
: US : 800-292-5898 (Technical inquiries)

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

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

MSDSRequest@lanxess.com

Recommended use of the chemical and restrictions on use

Recommended use : This substance is restricted to the following uses:, Lubricants and lubricant additives, Chemical intermediate

Restrictions on use : Reserved for industrial and professional use.

SECTION 2. HAZARDS IDENTIFICATION

Form	powder
Colour	white to off-white
Odour	characteristic

GHS Classification

Combustible dust :
Skin sensitisation : Category 1

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6


Revision Date: 09/04/2018

Print Date: 03/12/2019

Long-term (chronic) aquatic hazard : Category 4

GHS label elements

Signal word : **Warning**

Hazard pictograms : 

Hazard statements : May form combustible dust concentrations in air.
H317 May cause an allergic skin reaction.
H413 May cause long lasting harmful effects to aquatic life.

Other hazards : May form combustible dust concentrations in air during processing, handling or other means.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
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 on OSHA's list of regulated carcinogens.

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

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

Hazardous components

Chemical name	CAS-No.	Concentration (%)
4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline	10081-67-1	>= 90 - < 100 %

SECTION 4. FIRST AID MEASURES

- If inhaled : Remove to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : Wash off with warm water and soap.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,
for at least 15 minutes.
If symptoms persist, call a physician.
- If swallowed : Do NOT induce vomiting.
Rinse mouth with water.
Obtain medical attention.
- Most important symptoms and effects, both acute and delayed : sensitising effects
- 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 : Carbon dioxide (CO₂)
Dry powder
Foam
Water mist
- Unsuitable extinguishing media : Water spray
- 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.
Use personal protective equipment.

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Wear suitable protective equipment.
Avoid contact with skin and eyes.
Remove all sources of ignition.
Avoid dust formation.
Do not breathe dust.
- Environmental precautions : Should not be released into the environment.
Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
- Methods and materials for containment and cleaning up : Sweep up and shovel. Pick up and arrange disposal without creating dust.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.
Use with adequate ventilation.
Avoid dust formation.
Avoid breathing dust.
Keep container tightly closed.
Keep away from sources of ignition - No smoking.
May form explosive dust-air mixture.
Take precautionary measures against static discharges.
- Conditions for safe storage : Keep container tightly closed.
Keep in a well-ventilated place.
Keep away from heat.
- Materials to avoid : Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

- Engineering measures : Effective exhaust ventilation system

Personal protective equipment

- Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
Respirator with a dust filter

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

Hand protection	:	
Remarks	:	Gauntlets PVC or other plastic material gloves
Eye protection	:	Safety glasses with side-shields
Skin and body protection	:	Impervious clothing Rubber or plastic boots
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Color	:	white to off-white
Odor	:	characteristic
Odour Threshold	:	No data available
pH	:	No data available
Melting point/range	:	98.5 °C
Boiling point/boiling range	:	No data available
Evaporation rate	:	Not applicable
Flash point	:	276.7 °C Method: Tag closed cup
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Relative density	:	1.14
<u>Solubility(ies)</u>		
Water solubility	:	insoluble
Solubility in other solvents	:	soluble
Partition coefficient: n-octanol/water	:	log Pow: > 3 No data available
Auto-ignition temperature	:	298 °C

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

Viscosity

Viscosity, kinematic : Not applicable

Molecular weight : 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 : Hazardous polymerisation does not occur.

Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : Carbon oxides
Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 10,000 mg/kg

Acute dermal toxicity : Remarks: Not classified due to lack of data.

Acute toxicity estimate: 2,525 mg/kg
Method: Calculation method

Components:

4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline:

Acute oral toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Skin corrosion/irritation

Product:

Species: Rabbit

Result: No skin irritation

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

Components:

4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline:

Species: Rabbit

Exposure time: 24 h

Method: OECD Test Guideline 404

Result: No skin irritation

Serious eye damage/eye irritation

Product:

Species: Rabbit

Result: No eye irritation

Components:

4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline:

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitisation

Product:

Remarks: May cause sensitisation by skin contact.

Components:

4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline:

Species: Mouse

Method: OECD Test Guideline 429

Result: May cause sensitisation by skin contact.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Test Type: Ames test
Result: negative

Components:

4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

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 on OSHA's list of regulated carcinogens.

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.

Reproductive toxicity

Components:

4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline:

Reproductive toxicity -
Assessment

: No toxicity to reproduction, Information given is based on data obtained from similar substances.

No effects on or via lactation, Information given is based on data obtained from similar substances.

Repeated dose toxicity

Product:

Species: Rat

No observed adverse effect level: 100 mg/kg

Application Route: Oral

Exposure time: 13 weeks

Method: OECD Test Guideline 408

GLP: yes

Further information

Product:

Remarks: Symptoms may be delayed.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish

:

Remarks: No data available

Components:

4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline:

Toxicity to fish

:

LC50 (Poecilia reticulata (guppy)): 100 mg/l

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 100 mg/l
Exposure time: 48 h
Test Type: Immobilization
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 100 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.038 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211
GLP: yes
Remarks: No toxicity at the limit of solubility

Ecotoxicology Assessment

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

Persistence and degradability

Product:

Biodegradability : Remarks: Not readily biodegradable.

Components:

4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline:

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

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline:

Bioaccumulation : Bioconcentration factor (BCF): 1,245

Partition coefficient: n-octanol/water : log Pow: 8.51
Method: estimated

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

Mobility in soil

Product:

Mobility : Remarks: No data available

Other adverse effects

Product:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information : Avoid release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : In accordance with local and national regulations. Dispose of wastes in an approved waste disposal facility. Do not contaminate ponds, waterways or ditches with chemical or used container.

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

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

Not classified as dangerous in the meaning of transport regulations.

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

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 : Combustible dust
Respiratory or skin sensitisation

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.

Please note that Section 3 of this document lists only the hazardous components required by the specific country or region hazard communication regulations. The chemical identifiers listed in Section 3 are used globally for hazard communication purposes and may not reflect those used for chemical inventory coverage in a particular country or region. The chemical inventory information given in Section 15 of this document applies to the product as a whole and should be used when evaluating inventory compliance.

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

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
TCSI	On the inventory, or in compliance with the inventory
US.TSCA	On TSCA Inventory

SAFETY DATA SHEET



NAUGALUBE® AMS

Version: 1.6

Revision Date: 09/04/2018

Print Date: 03/12/2019

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.