

Version:

Date of Issue:

04.12.2008

1.3

Date printed:

19.07.2009

Chemtura Corporation urges the recipient of this Safety Data Sheet to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents and contractors of the information on this sheet,(2) furnish a copy to each of your customers for the product, and (3) request your customers to inform their employees and customers as well.

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Identification of the substance Naugard® PANA **or preparation:**

Chemical name:

Phenyl-alpha-naphthylamine

Naugard® PANA

Synonyms:

Use of substance/preparation:

Chemical intermediate

Stabilizer

Company identification: Chemtura Europe Limited

Kennet House 4 Langley Quay Slough Berkshire

SL3 6EH

United Kingdom

Emergency telephone

+44 (0)208 762 8322

number:

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

Date of Issue: 04.12.2008

Environmental, Health and

Safety Department:

Prepared by

Tel.: +44 (0) 1753.603.000

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

(EU) +44 (0) 1753.603.000

Email: MSDSRequest@chemtura.com

2. HAZARDS IDENTIFICATION

EINECS/ELINCS# 201-983-0

Main hazards and effects:

Harmful if swallowed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	% by weight	HAZARD	DANGER SYMBOL(S)
Phenyl-alpha-naphthylamine CAS# 90-30-2	>= 99	R22	Xn

(M)SDS# 000000010670 Page: 1 of 6



Naugard® PANA

Version: 1.3

Date of Issue: 04.12.2008

19.07.2009 Date printed:

4. FIRST AID MEASURES

<u>Swallowing</u>

Do not induce vomiting. Rinse mouth with water. Obtain medical attention.

Inhalation

Remove to fresh air. Obtain medical attention.

Skin contact

Remove contaminated clothing. Wash thoroughly with warm water using a mild soap. Obtain medical attention if irritation persists.

Eye contact

Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention if irritation persists.

5. FIRE-FIGHTING MEASURES

Flash point: 214 °C

Hazardous combustion products

Oxides of carbon.

Oxides of nitrogen.

Special fire fighting procedures

Do not discharge extinguishing waters into streams, rivers and lakes.

<u>Special protective equipment for firefighters</u>
Body covering protective clothing, full "turn-out" gear.

Self-contained breathing apparatus.

Extinguishing media

Suitable:

Large fires:

- alcohol-type foam or universal-type foams

Small fires: - CO2 - dry chemical

- water spray

Unsuitable: - water jets

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear suitable protective equipment., Avoid contact with eyes and skin.

Environmental precautions

Prevent from entering sewer system, surface water or soil.

Methods for cleaning up

Sweep up and collect in a suitable container for disposal.

Avoid dust formation.

7. HANDLING AND STORAGE

HANDLING

Do not get in eyes, on skin, on clothing., Do not swallow., Avoid dispersion of dust to reduce fire and explosion potential., Do not eat, drink or smoke when

STORAGE

(M)SDS# 00000010670 Page: 2 of 6



Version: 1.3

<u>Date of Issue:</u> 04.12.2008

Date printed: 19.07.2009

Naugard® PANA

Storage requirements

Store in a cool, dry place., Keep container closed., Store in original containers away from incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

PERSONAL PROTECTION

Respiratory protection

In the absence of engineering controls sufficient to maintain airborne concentrations below recommended occupational exposure limit values, appropriate respiratory protection should be utilized., The determination of appropriate respiratory protection is best performed, on a case by case basis, taking into consideration the exposure conditions of the particular operation., Use an approved full-face air-purifying respirator. For emergency and other conditions where the exposure limit may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus., The respirator manufacturer should be consulted to ensure that the air-purifying cartridges utilized will provide adequate protection for the exposure conditions and period of wear concerned.

Hand protection / protective gloves

Chemical resistant protective gloves

Eye protection

Wear suitable eye protection., Safety glasses with side shields., Face shield or chemical splash goggles in case of splashing.

Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

ENGINEERING CONTROLS

Ventilation

Apply local exhaust ventilation at points of dust generation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Δ	P	P	F.A	١R	Δ	N	C	F
/ 1			11	71/	./1	Τ.	v	Ľ

 Physical state
 Granular solid

 Color
 Light brown

to

Violet

Odor Amine

Odor threshold Not available

OTHER PROPERTIES

Boiling point Not applicable

Melting point 55 °C

Solidification Not available

pH Not available

Specific gravity (H2O=1) Not available

Density 1,23 g/cm³

Vapor pressure

Solubility in water Insoluble

Solubility in organic solvents Soluble

Partitioning coefficient Not available

(M)SDS# 000000010670 Page: 3 of 6



Version: 1.3

Date of Issue: 04.12.2008

Date printed: 19.07.2009

Flash point

214 °C

Naugard® PANA

Autoignition temperature Not available

Upper explosion limits Not available

Lower explosion limits Not available

Percent volatiles Not available

10. STABILITY AND REACTIVITY

Stability: This product is stable under normal storage and handling conditions.

Stability - Conditions to avoid:

Strong oxidizing agents.

Hazardous combustion products:

Oxides of carbon. Oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

SWALLOWING

Test results

Acute toxicity: LD50 Rat

Result: 1.630 mg/kg

SKIN ABSORPTION

Test results

- Mouse Chronic toxicity:

Remark: Chronic study produced multisite tumors.

SKIN CONTACT

Test results

Skin irritation: Species: Rabbit

Result: Slight

EYE CONTACT

Test results

Species: Rabbit Eye irritation:

Result: Slight

SENSITIZATION

Test results: Species: Human patch test

Result: Negative

MUTAGENICITY

Assessment: Ames-test: no mutagenic effect This material was negative in a mouse lymphoma mutagenicity assay.

(M)SDS# 00000010670 Page: 4 of 6



Version: 1.3

<u>Date of Issue:</u> 04.12.2008

Date printed: 19.07.2009

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

General: Do not discharge to sewers and natural waters., Incinerate in a furnace where permitted under national and local

Naugard® PANA

regulations.

14. TRANSPORT INFORMATION

ADR/RID

This product is not regulated by ADR.

IMDG Classification

This product is not regulated by IMDG.

ICAO/IATA Classification

This product is not regulated by ICAO.

15. REGULATORY INFORMATION

EC classification

Danger symbol(s) : Xn

Risk phrases : R22 Harmful if swallowed.

Safety phrases : S24/25 Avoid contact with skin and eyes.

Contains : Phenyl-alpha-naphthylamine

WGK : 2, Hazard to water; VwVwS, Annex 3

CHEMICAL INVENTORY

Canada: This product is on the DSL.

Europe: The ingredients of this mixture are on the EINECS inventory.

United States:
Australia:
China:
This product is on the TSCA inventory.
This product is on the AICS inventory.
This product is on the IECSC Inventory.
Japan:
This product is on the ENCS inventory.

Korea: This product is listed on the Existing Chemicals List (ECL).

Philippines: This product is on the PICCS.

(M)SDS# 000000010670 Page: 5 of 6





Version: 1.3

<u>Date of Issue:</u> 04.12.2008

Date printed: 19.07.2009

Naugard® PANA

16. OTHER INFORMATION

List of R-phrases used in data sheet. See section 15 for classification details. Risk phrases : R22 Harmful if swallowed.

FURTHER INFORMATION

Where appropriate, use CEN approved personal protection equipment. For further information see the webpage According to Regulation (EU) No. 1907/2006

Carechem24 International Worldwide Coverage - Chemtura Corporation

Emergency Telephone Numbers

Europe:	All European Countries	+44 (0)208 762 8322
Asia Pacific:	Australia, New Zealand	+44 (0)870 190 6777
	China, Hong Kong, Singapore, Philippines, Taiwan, Vietnam, India	+65 63 222 513
	Japan, North & South Korea	+65 63 222 514
	Indonesia	+62 21 230 5992
	Malaysia	+60 3 205 35 754
	Thailand	+66 2 642 7851
Middle East:	Arabic speaking countries	+961 3 487 287
	All other countries	+44 (0)208 762 8322
Africa:	Arabic speaking countries	+961 3 487 287
	All other countries	+44 (0)208 762 8322
Latin America:	All	+44 (0)208 762 8322
China:	All	+86 10 5100 3039

STP	Standard temperature and pressure
W/W	Weight/Weight

Copyright 2008 Chemtura Corporation

THE OPINIONS EXPRESSED HEREIN ARE THOSE OF QUALIFIED EXPERTS WITHIN CHEMTURA CORPORATION. WE BELIEVE THAT THE INFORMATION CONTAINED HEREIN IS CURRENT AS OF THE DATE OF THIS SAFETY DATA SHEET. SINCE THE USE OF THIS INFORMATION AND OF THESE OPINIONS AND THE CONDITIONS OF USE OF THIS PRODUCT ARE NOT WITHIN THE CONTROL OF CHEMTURA CORPORATION, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCTS.

(M)SDS# 000000010670 Page: 6 of 6