

## **NAUGARD® 445 POWDER**

Version 1.2

Revision Date 26.11.2014

Print Date 23.10.2015

### **SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

#### **1.1 Product identifier**

Trade name : NAUGARD® 445 POWDER

Registration number : REACH: 01-2119967418-24-XXXX

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

Substance No. : 233-215-5

#### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use of the Substance/Mixture : Antioxidant

Recommended restrictions on use : Reserved for industrial and professional use.

#### **1.3 Details of the supplier of the safety data sheet**

Company: Addivant UK, Ltd.  
Tenax Road, Trafford Park  
Manchester  
United Kingdom  
M17 1WT  
Telephone : +44-203-014-0532

Customer Service: +44 (0)208 762 8322  
Prepared by msdsrequest@addivant.com

Further information for the safety data sheet :  
msdsrequest@addivant.com

#### **1.4 Emergency telephone number**

Emergency telephone number: +44 (0) 1235 239 670  
For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

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### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1  
Chronic aquatic toxicity, Category 4

H317: May cause an allergic skin reaction.  
H413: May cause long lasting harmful effects to aquatic life.

##### Classification (67/548/EEC, 1999/45/EC)

Irritant

R43: May cause sensitisation by skin contact.  
R53: May cause long-term adverse effects in the aquatic environment.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word

: Warning

Hazard statements

: H317  
H413

May cause an allergic skin reaction.  
May cause long lasting harmful effects to aquatic life.

Precautionary statements

: **Prevention:**

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P273

Avoid release to the environment.

P280

Wear protective gloves.

**Response:**

P333 + P313

If skin irritation or rash occurs: Get medical advice/ attention.

P362 + P364

Take off contaminated clothing and wash it before reuse.

**Disposal:**

P501

Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

- 10081-67-1 4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline

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### 2.3 Other hazards

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| Chemical Name                                                          | CAS-No.<br>EINECS-No. / ELINCS No. | Concentration [%] |
|------------------------------------------------------------------------|------------------------------------|-------------------|
| 4-(1-methyl-1-phenylethyl)-N-[4-(1-methyl-1-phenylethyl)phenyl]aniline | 10081-67-1<br>233-215-5            | >= 90 - <= 100    |

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of 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.

### 4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Allergic reactions  
Dermatitis  
Irritation
- Risks : May cause sensitisation by skin contact.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

- Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>)  
Dry powder

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Foam  
Water mist

Unsuitable extinguishing media : Water spray

### **5.2 Special hazards arising from the substance or mixture**

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

### **5.3 Advice for firefighters**

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

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

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Wear suitable protective equipment.  
Avoid contact with skin and eyes.  
Remove all sources of ignition.  
Avoid dust formation.  
Do not breathe dust.

### **6.2 Environmental precautions**

Environmental precautions : Should not be released into the environment.  
Do not flush into surface water or sanitary sewer system.  
Avoid subsoil penetration.

### **6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up : Sweep up and shovel.  
Pick up and arrange disposal without creating dust.

### **6.4 Reference to other sections**

Refer to protective measures listed in sections 7 and 8.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.  
Use with adequate ventilation.  
Avoid dust formation.  
Avoid breathing dust.

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Keep container tightly closed.  
Keep away from sources of ignition - No smoking.  
May form explosive dust-air mixture.  
Take precautionary measures against static discharges.

### **7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Keep container tightly closed.  
Keep in a well-ventilated place.  
Keep away from heat.

Other data : Stable under recommended storage conditions.

### **7.3 Specific end use(s)**

Specific use(s) : Chemical intermediate

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

Contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Personal protective equipment**

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

Hand protection : Gauntlets  
PVC or other plastic material gloves

Eye protection : Safety glasses with side-shields

Skin and body protection : impervious clothing

#### **Environmental exposure controls**

General advice : Should not be released into the environment.  
Do not flush into surface water or sanitary sewer system.  
Avoid subsoil penetration.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

|                                        |                                                                   |
|----------------------------------------|-------------------------------------------------------------------|
| Appearance                             | : solid                                                           |
| Colour                                 | : white, to, off-white                                            |
| Odour                                  | : characteristic                                                  |
| Odour Threshold                        | : No information available.                                       |
| Flash point                            | : 276,7 °C                                                        |
|                                        | Method: Tag closed cup                                            |
| Ignition temperature                   | : 298 °C                                                          |
| Lower explosion limit                  | :<br>No data available                                            |
| Upper explosion limit                  | :<br>No data available                                            |
| Flammability (solid, gas)              | : No information available.                                       |
| Auto-ignition temperature              | : No information available.                                       |
| pH                                     | : No information available.                                       |
| Melting point/range                    | : 98,5 °C                                                         |
| Boiling point/boiling range            | : Note: No data available                                         |
| Vapour pressure                        | : No information available.                                       |
| Density                                | : No information available.                                       |
| Water solubility                       | :<br>insoluble                                                    |
| Partition coefficient: n-octanol/water | : Pow:<br>log Pow: >3                                             |
| Solubility in other solvents           | : 408 g/l<br><br>7 g/l<br><br>Medium: Acetone<br>Medium: Methanol |

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Relative vapour density : No information available.  
Evaporation rate : No information available.

### **9.2 Other information**

## **SECTION 10: STABILITY AND REACTIVITY**

### **10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

### **10.2 Chemical stability**

Stable under normal conditions.

### **10.3 Possibility of hazardous reactions**

Hazardous reactions : Hazardous polymerisation does not occur.

### **10.4 Conditions to avoid**

Conditions to avoid : Extremes of temperature and direct sunlight.

### **10.5 Incompatible materials**

Materials to avoid : Strong oxidizing agents

### **10.6 Hazardous decomposition products**

Hazardous decomposition products : Carbon oxides  
Nitrogen oxides (NOx)

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

Acute oral toxicity : LD50: > 10.000 mg/kg  
Species: Rat

Acute oral toxicity  
4-(1-methyl-1-phenylethyl)-N- : LD50: > 5.000 mg/kg  
[4-(1-methyl-1-phenylethyl)phenyl]aniline  
Species: Rat

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

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

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### Acute dermal toxicity

4-(1-methyl-1-phenylethyl)-N- : LD50: > 3.000 mg/kg  
[4-(1-methyl-1-phenylethyl)phenyl]aniline : Species: Rabbit  
Remarks: Information given is based on data obtained from similar substances.

### Skin corrosion/irritation

Skin irritation : Species: Rabbit  
Result: No skin irritation

### Skin irritation

4-(1-methyl-1-phenylethyl)-N- : Species: Rabbit  
[4-(1-methyl-1-phenylethyl)phenyl]aniline : Result: No skin irritation  
Method: OECD Test Guideline 404  
Exposure time: 24 h  
Remarks: 0,5 ml; occlusive

### Serious eye damage/eye irritation

Eye irritation : Species: Rabbit  
Result: No eye irritation

### Eye irritation

4-(1-methyl-1-phenylethyl)-N- : Species: Rabbit  
[4-(1-methyl-1-phenylethyl)phenyl]aniline : Result: No eye irritation

### Respiratory or skin sensitisation

Sensitisation : Remarks: Causes sensitisation.

### Sensitisation

4-(1-methyl-1-phenylethyl)-N- : Classification: May cause sensitisation by skin contact.  
[4-(1-methyl-1-phenylethyl)phenyl]aniline

### Germ cell mutagenicity

Genotoxicity in vitro : Ames test  
Result: negative

### Germ cell mutagenicity

#### Remarks

4-(1-methyl-1-phenylethyl)-N- : Tests on bacterial or mammalian cell cultures did not show  
[4-(1-methyl-1-phenylethyl)phenyl]aniline : mutagenic effects.

### Carcinogenicity Assessment



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Remarks : Not classified due to lack of data.

### Reproductive toxicity Assessment

Remarks : Not classified due to lack of data.

### Target Organ Systemic Toxicant - Repeated exposure

### Toxicology Assessment

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

### 12.2 Persistence and degradability

Biodegradability : Remarks:  
Not readily biodegradable.

Biodegradability  
4-(1-methyl-1-phenylethyl)-N- : Result: According to the results of tests of biodegradability this  
[4-(1-methyl-1-phenylethyl)phenyl]aniline product is not readily biodegradable.  
Method: estimated

### 12.3 Bioaccumulative potential

Bioaccumulation : Remarks:  
No data available

### 12.4 Mobility in soil

Mobility : Remarks:  
No data available

### 12.5 Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).  
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

Additional ecological : Avoid release to the environment.  
information



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### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### **13.1 Waste treatment methods**

Product : In accordance with local and national regulations.

### **SECTION 14: TRANSPORT INFORMATION**

#### **ADR**

Not dangerous goods

#### **IATA**

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### **RID**

Not dangerous goods

### **SECTION 15: REGULATORY INFORMATION**

#### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Candidate List of Substances : Neither banned nor restricted  
of Very High Concern for  
Authorisation

Major Accident Hazard : 96/82/EC Update: 2003  
Legislation Directive 96/82/EC does not apply

Water contaminating class : WGK 2 water endangering  
(Germany) 7.800  
Description of the classification procedure for all materials,  
which are not named in the appendices 1 and 2, on the basis  
of R-sentence-classifications of the European dangerous  
materials  
ZDE\_WGK Update: 2009-02-01

#### **Notification status**

CH INV : On the inventory, or in compliance with the inventory



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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  
ISHL : 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

### 15.2 Chemical Safety Assessment

No information available.

## SECTION 16: OTHER INFORMATION

### Full text of R-phrases referred to under sections 2 and 3

R43 May cause sensitisation by skin contact.  
R53 May cause long-term adverse effects in the aquatic environment.

### Full text of H-Statements referred to under sections 2 and 3.

H317 May cause an allergic skin reaction.  
H413 May cause long lasting harmful effects to aquatic life.

### Further information

### Carechem24 International Worldwide Coverage - Addivant

### Emergency Phone Numbers:

|               |                        |                                 |
|---------------|------------------------|---------------------------------|
| Europe:       | All European Countries | +44 (0) 1235 239 670            |
| Asia Pacific: | East / South East Asia | Regional Number : +65 3158 1074 |
|               | Australia              | +61 2801 44558                  |
|               | New Zealand            | +64 9929 1483                   |
|               | China Taiwan           | +86 10 5100 3039                |
|               | Japan                  | +81 345 789 341                 |
|               | Indonesia              | 00780 3011 0293                 |
|               | :Malaysia              | +60 3 6207 4347                 |
|               | Thailand               | 001800 1 2066 6751              |
|               | Korea                  | +65 3158 1285                   |
|               | Vietnam                | +65 3158 1255                   |
|               | India                  | +65 3158 1198                   |
|               | Pakistan               | +65 3158 1329                   |
|               | Philippines            | +65 31581203                    |



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|                              |                           |                      |
|------------------------------|---------------------------|----------------------|
|                              | Sri Lanka                 | +65 3158 1195        |
|                              | Bangladesh                | +65 3158 1200        |
| <u>Middle East / Africa:</u> | Arabic speaking countries | +44 (0) 1235 239 671 |
|                              | All other countries       | +44 (0) 1235 239 670 |
| <u>America</u>               | United States / Canada    | 001866 928 0789      |
| <u>Latin America:</u>        | Brazil                    | +55 113 711 9144     |
|                              | All other countries       | +44 (0) 1235 239 670 |
|                              | Mexico                    | +52 555 004 8763     |

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