



# SAFETY DATA SHEET

according to regulation (EC) no 1907/2006

**Caste off**

Version 2 (UK)

Issue date 11/02/2009

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

### Product information

Trade name : **Caste off**

Usage : fungicide

Company : Nufarm UK Limited  
Wyke Lane  
Wyke  
Bradford  
West Yorkshire BD12 9EJ  
United Kingdom

Telephone : +44 (0)1274 691234  
Telefax : +44 (0)1274 691176  
E-mail : infouk@uk.nufarm.com

Emergency telephone : **+44(0)1274 696603**

## 2. HAZARDS IDENTIFICATION

May cause heritable genetic damage.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Possible risk of impaired fertility.  
Possible risk of harm to the unborn child.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** : suspension concentrate (SC)  
Contains 500g/L Carbendazim

Components	CAS-No.	EINECS-No. ELINCS-No.	Symbol(s)	R-phrases(s)	Concentration (w/w)
carbendazim	10605-21-7	234-232-0	T, N	R46, R50/53, R60, R61	42.7 %
Propane-1,2-diol	57-55-6	200-338-0		n.c.	5% - 10%

## 4. FIRST AID MEASURES

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin contact : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. If symptoms persist, call a physician. Wash contaminated clothing before re-use.

Inhalation : Move to fresh air. If symptoms persist, call a physician.

Ingestion : Do NOT induce vomiting. Rinse mouth. If conscious, drink



**SAFETY DATA SHEET**  
according to regulation (EC) no 1907/2006

**Caste off**  
Version 2 (UK)

Issue date 11/02/2009

plenty of water. If symptoms persist, call a physician.

**Notes to physician**

Treatment : Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

- Specific hazards during fire fighting : In the event of fire (HCl,Cl<sub>2</sub>,CO) may be formed.
- Special protective equipment for fire-fighters : Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.
- Suitable extinguishing media : Water spray, Carbon dioxide (CO<sub>2</sub>), Dry powder, Alcohol-resistant foam
- Extinguishing media which shall not be used for safety reasons : High volume water jet
- Further information : Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions : Wear personal protective equipment. (see Chapter 8)
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Sweep up and shovel into suitable containers for disposal.
- Additional advice : Never return spills in original containers for re-use.

**7. HANDLING AND STORAGE**

**Handling**

Safe handling advice : Wear personal protective equipment.

**Storage**

- Requirements for storage areas and containers : Store in original container. Keep containers tightly closed in a cool, well-ventilated place.
- Advice on common storage : Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.



## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	occupational exposure limits	Note
carbendazim	10605-21-7		
Propane-1,2-diol	57-55-6	474 mg/m <sup>3</sup>	Vapour and particulates

### Personal protective equipment

- Respiratory protection : No special protective equipment required.
- Hand protection : PVC or nitrile-rubber gloves
- Eye protection : Safety glasses, or, Goggles
- Skin and body protection : lightweight protective clothing
- Hygiene measures : Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.
- Protective measures : Avoid contact with skin, eyes and clothing. Keep working clothes separately.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

- Physical state : liquid
- Colour : white

### Other data

- Flash point : not applicable
- Vapour pressure : not applicable
- Density : 1.17 g/cm<sup>3</sup>  
at 20 °C
- Relative vapour density : no data available
- Partition coefficient: n-octanol/water : log POW = 1.51



**SAFETY DATA SHEET**  
according to regulation (EC) no 1907/2006

**Caste off**  
Version 2 (UK)

Issue date 11/02/2009

(pH 7)

## 10. STABILITY AND REACTIVITY

Conditions to avoid : No dangerous reaction known under conditions of normal use.

Materials to avoid : Strong acids and strong bases

## 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat  
Dose: > 15,000 mg/kg

Acute dermal toxicity : LD50 rat  
Dose: > 2,000 mg/kg

Acute inhalation toxicity : LC50 rat  
Dose: > 10 mg/l

Skin irritation : Classification: No skin irritation

Eye irritation : Classification: No eye irritation

Sensitisation : Classification: Not sensitizing to skin.

Evaluation mutagenicity : Muta. Cat.2

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

Toxicity to fish : LC50  
Dose: 0.83 mg/l  
Testing period: 96 h

Toxicity to daphnia : EC50  
Dose: 0.13 - 0.22 mg/l  
Testing period: 48 h

Toxicity to algae : EC50



## SAFETY DATA SHEET

according to regulation (EC) no 1907/2006

**Caste off**

Version 2 (UK)

Issue date 11/02/2009

Dose: 1.3 mg/l  
Exposure time: 72 h

### 13. DISPOSAL CONSIDERATIONS

Product : Dispose of product and packaging in accordance with The Green Code. (The Code of Practice for the safe use of Pesticides on Farms and Holdings.) A MAFF Publication.

Contaminated packaging : Do not dispose with household waste. Do not re-use empty containers. Dispose at licensed waste disposal site capable of accepting pesticides in compliance with applicable regulations. according to EC directive 94/62/EC

According to European Directive 2000/532/EC as amended :

Waste Key Number : 02 01 08 (agrochemical waste containing dangerous substances)

### 14. TRANSPORT INFORMATION

UN-Number : **3082**

Description of the goods : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.\*

#### ADR/RID

Class : 9

Packaging group : III

#### IMDG

Class : 9

Packaging group : III

Marine pollutant : Y

#### IATA-DGR

Class : 9

Packaging group : III



**SAFETY DATA SHEET**  
according to regulation (EC) no 1907/2006

**Caste off**  
Version 2 (UK)

Issue date 11/02/2009

## 15. REGULATORY INFORMATION

Symbol(s)	: T N	Toxic Dangerous for the environment
R-phrase(s)	: R46 R50/53  R60 R61	May cause heritable genetic damage. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May impair fertility. May cause harm to the unborn child.
S-phrase(s)	: S35  S53  S57	This material and its container must be disposed of in a safe way. Avoid exposure - obtain special instructions before use. Use appropriate container to avoid environmental contamination.
Other regulations	: The product is classified and labelled in accordance with EC directives or respective national laws.	

## 16. OTHER INFORMATION

Print Date : 02/11/2009

(Alterations are indicated in the left hand margin by: || )

Full text of any R phrases referred to under heading 3:

- R46 - May cause heritable genetic damage.
- R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R60 - May impair fertility.
- R61 - May cause harm to the unborn child.
- n.c. - This chemical substance is not classified in the Annex VI of Regulation (EC) No 1272/2008.



## SAFETY DATA SHEET

according to regulation (EC) no 1907/2006

*Caste off*

Version 2 (UK)

Issue date 11/02/2009

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.

The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.