

**SAFETY DATA SHEET** (EC 1907/2006)**DORMEX**

|               |        |               |              |
|---------------|--------|---------------|--------------|
| Material no.  |        | Version       | 4.3 / REG_EU |
| Specification | 132506 | Revision date | 06.03.2008   |
| VA-Nr         |        | Print Date    | 06.03.2008   |
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**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

|                                     |   |  |
|-------------------------------------|---|--|
| Trade name                          | : | DORMEX   |
| Company                             | : | AlzChem Trostberg GmbH<br>CHEMIEPARK TROSTBERG<br>Dr.-Albert-Frank-Str. 32<br>D-83308 Trostberg, Germany |
| Telephone                           | : | +49 (0)8621 86-3351  |
| Telefax                             | : | +49 (0)8621 86-2880  |
| Email address                       | : | alz-pst@degussa.com  |
| Emergency telephone number          | : | +49 (0)2365 49-2232  |
| Emergency telephone number(Telefax) | : | +49 (0)2365 49-4423  |
|                                     |   | Plant fire brigade, Infracor GmbH  |
| Use of the Substance / Preparation  | : | Agricultural products  |

**2. HAZARDS IDENTIFICATION****Additional safety information for humans and the environment**

Classification according to directives(1999/45/EC and 67/548/EEC)

Harmful in contact with skin and if swallowed.

Irritating to eyes and skin.

May cause sensitization by skin contact.

Dangerous for the environment

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Additional hazard information for humans and the environment:

Violent, exothermic reaction with acids, bases and temperatures above 40°C.

Use of alcoholic beverages enhances the toxic effects.

Dermal absorption possible

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Chemical nature**

aqueous preparation with cyanamide

**Information on ingredients / Hazardous components**

|                            |            |                  |
|----------------------------|------------|------------------|
| • cyanamide; carbamonitril | 49% - 51%  |                  |
| CAS-No.                    | 420-04-2   | EC-No. 206-992-3 |
|                            | T; R25     |                  |
|                            | Xn; R21    |                  |
|                            | Xi; R36/38 |                  |
|                            | R43        |                  |
| • orthophosphoric acid     | < 2%       |                  |
| CAS-No.                    | 7664-38-2  | EC-No. 231-633-2 |

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C; R34

See chapter 16 for text of risk phrases

**Other information**

The preparation itself has been tested/classified (see items 11 and 15).

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**4. FIRST AID MEASURES****General advice**

If feeling unwell seek medical advice.  
after absorbing large amounts of substance:  
Immediately contact a doctor or Poisons Information Centre, and follow the advice given.  
Show this safety data sheet to the doctor in attendance.

**Inhalation**

Move to fresh air.  
Oxygen or artificial respiration if needed.  
Consult a physician after significant exposure.

**Skin contact**

Take off all contaminated clothing immediately.  
Wash off immediately with plenty of water.  
If skin irritation occurs, call physician.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
Keep eye wide open while rinsing.

**Ingestion**

Rinse out mouth.  
Drink 1 or 2 glasses of water.  
Do not induce vomiting.  
Call a physician immediately.  
If conscious and medical aid is not available immediately, induce vomiting. Be sure to keep victim's head below hips to avoid aspiration of vomitus into the lungs.

**Notes to physician**

Symptoms:  
erythema  
nausea  
increased pulse frequency,  
Fall in blood pressure  
feeling of burning,  
headache  
Irritation of skin and mucous membranes  
after the intake of large amounts circulatory depression up to unconsciousness are possible  
Caution: Alcoholic beverages interact with cyanamide.  
Symptoms showing flush are possible (difficulty in breathing, bright red face).  
The symptoms of this interaction disappear rapidly and are generally harmless.

**Treatment:**

No specific antidote known.  
Symptomatic treatment.  
After the intake of small amounts: administer activated charcoal, sodium sulfate and much liquid orally.  
After the intake of large amounts: monitoring of circulatory functions, if necessary irrigation of the stomach preventing aspiration and taking into account the irritating properties to mucous membranes.

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In case of skin irritation, use corticoid containing external preparations.

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**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

carbon dioxide (CO<sub>2</sub>), dry powder, dry sand, water spray, foam

**Specific hazards during fire fighting**

In the case of fire, the following hazardous smoke fumes may be produced:

ammonia

nitrous gases

Carbon oxides

Hydro-cyanic acid

**Special protective equipment for fire-fighters**

In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

**Further information**

Do not contaminate surface water.

Cool containers / tanks with water spray.

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**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

Use personal protective equipment.

Avoid contact with skin, eyes and clothing.

Ensure adequate ventilation.

**Environmental precautions**

Try to prevent the material from entering drains or water courses.

**Methods for cleaning up**

Absorb with liquid-binding material, e. g.: saw dust, sand, universal binder

Sweep up and shovel.

Pour into containers which can be tightly sealed.

Disposal according to local authority regulations.

Then flush with water.

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**7. HANDLING AND STORAGE****Handling****Safe handling advice**

Do not consume alcoholic beverages during handling cyanamide.

Use only in well-ventilated areas.

Avoid contact with skin, eyes and clothing.

For professional use only.

Handle in accordance with good industrial hygiene and safety practices.

**Advice on protection against fire and explosion**

Keep away from combustible material.

Avoid temperatures above 40°C.

Incompatible with acids and bases.

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**Storage****Requirements for storage areas and containers**

Protect from heat and exposure to direct sunlight

Keep out of the reach of children.

Suitable materials polypropylene, polyethylene, enamel, Austenitic steel

**Further information**

Storage capability limited; dependent on Stabilization.

**Advice on common storage**

Incompatible with acids and bases.

Keep away from food, drink and animal feedingstuffs.

**German storage class**

8B - non-combustible corrosive substances

**Storage stability**

< 20 °C

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Components with workplace control parameters****• cyanamide; carbamonitril**

CAS-No. 420-04-2

EC-No.

206-992-3

Control parameters 0.58 ppm

Time Weighted Average (TWA):(EU ELV)

1 mg/m<sup>3</sup>

Control parameters

Skin designation:(EU ELV)

Can be absorbed through the skin.

**• orthophosphoric acid**

CAS-No. 7664-38-2

EC-No.

231-633-2

Control parameters 1 mg/m<sup>3</sup>

Time Weighted Average (TWA):(EU ELV)

Control parameters 2 mg/m<sup>3</sup>

Short Term Exposure Limit (STEL):(EU ELV)

**Engineering measures**

Provide washing facilities in the workplace.

**Personal protective equipment****Respiratory protection**

If aerosol or mists are formed:

Half mask with a particle filter P2 (EN 143).

Recommendation:

MSA Auer Affinity FR (FFP 2 / EN 149)

MSA Auer GmbH, Berlin, Germany

**Hand protection**

In case of contact through splashing:

Glove material elbow-length rubber gloves

In case of full contact:

Glove material butyl-rubber, Recommendation: Butoject 898, Kächele-Cama Latex GmbH (KCL), Germany

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|                    |                              |
|--------------------|------------------------------|
| Material thickness | 0.7 mm                       |
| Break through time | > 480 min                    |
| Glove material     | nitrile rubber               |
| Material thickness | 0.4 mm                       |
| Break through time | > 120 min                    |
| Method             | DIN EN 374, Source: KCL GmbH |

Change protective gloves regularly.

**Eye protection**

Avoid contact with eyes.  
tightly fitting safety goggles

**Skin and body protection**

chemical protective suit  
rubber boots

**Hygiene measures**

When using, do not eat, drink or smoke.  
Wash hands before breaks and immediately after handling the product.  
Do not consume alcoholic beverages prior to, during and 24 hours after handling the product.  
Take off contaminated clothing and shoes immediately.  
Wash contaminated clothing before re-use.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

|        |           |
|--------|-----------|
| Form   | liquid    |
| Colour | blue      |
| Odour  | odourless |

**Safety data**

|                     |                        |         |
|---------------------|------------------------|---------|
| pH                  | 3.9 - 4.9              | (20 °C) |
| Melting point/range | -15 °C                 |         |
| Flash point         | not applicable         |         |
| Vapour pressure     | 0.003 hPa              | (20 °C) |
| Density             | 1.06 g/cm <sup>3</sup> | (20 °C) |
| Water solubility    | completely miscible    | (20 °C) |
| Viscosity, dynamic  | 1.026 mPa.s            | (20 °C) |

**10. STABILITY AND REACTIVITY**

|                                  |  |
|----------------------------------|--|
| Conditions to avoid              | temperatures: > 20 °C<br>Keep away from direct sunlight. |
| Materials to avoid               | acids and bases, combustible substances                  |
| Hazardous decomposition products | ammonia  |

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Hazardous reactions                      Violent, exothermic reaction.  
    Danger of fire.

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**11. TOXICOLOGICAL INFORMATION**

|                           |   |
|---------------------------|---|
| Acute oral toxicity       | LD50 Rat: 284 mg/kg<br>related to substance:    Product   |
| Acute inhalation toxicity | LC50 Rat: > 2 mg/l / 4 h<br>maximum concentration in the test: no animals died.<br>Own test result.<br>related to substance:    Product |
| Acute dermal toxicity     | LD50 Rabbit: 1700 mg/kg<br>Method: EPA FIFRA 81-2<br>Own test result.   |
| Skin irritation           | Rabbit<br>irritating<br>related to substance:    Product  |
| Eye irritation            | Rabbit<br>irritating  |
| Sensitization             | guinea pig: sensitizing   |
| Mutagenicity assessment   | Not mutagenic in AMES Test.<br><br>Did not show mutagenic effects in animal experiments.  |
| Human experience          | Interactions with alcohol (ethanol).<br><br>Irritating to eyes and skin.  |

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**12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)**

|                  |  |
|------------------|--|
| Biodegradability | Not readily biodegradable.<br>Evidence for inherent biodegradability.<br>Biodegradable in the soil (sediment). |
|------------------|--|

**Behaviour in environmental compartments****Ecotoxicity effects**

|                  |  |
|------------------|--|
| Toxicity to fish | LC50 Oncorhynchus mykiss: 180 mg/l / 96 h<br>Method: OECD 204<br><br>NOEC Oncorhynchus mykiss: 7.4 mg/l / 21 d<br>Method: OECD 204<br>Own test result. |
|------------------|--|

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EC50 *Lepomis macrochirus*: 88 mg/l / 96 h

Method: OECD 204

related to substance: Product

Toxicity to daphnia

EC50 *Daphnia magna*: 6.5 mg/l / 48 h

Method: OECD 202 part 1

related to substance: Product

Toxicity to algae

EC50 *Pseudokirchneriella subcapitata*: 13.2 mg/l / 90 h

related to substance: Product

Toxicity to bacteria

EC 10 *Pseudomonas putida*: 157 mg/l

Figure relates to the main component

Toxicity in other terrestrial non-mammals

LD50 honeybees: ca. 100 µg/insect

Method: acute contact toxicity test

**Further information on ecology**

Further Information

Do not allow entrance in stretches of water / surface water.

Additional ecological information

Under acid conditions (pH &lt; 4) the product hydrolyses to urea, which is easily biodegradable.

**13. DISPOSAL CONSIDERATIONS****Product**

In compliance with actual waste regulations, the product must be brought to a suitable disposal plant.

**Uncleaned packaging**

Rinse empty containers with water and use the rinse-water to prepare the working solution.

Triple rinse containers.

Do not re-use empty containers.

Can be disposed of as a solid waste or burned in a suitable installation subject to local regulations.

**Waste Key Number**

agrochemical waste containing dangerous substances (EU)

Agree on waste code no. with disposal company.

**14. TRANSPORT INFORMATION****Land transport ADR/RID/GGVSE (Germany)**

|   |           |
|---|-----------|
| Class   | 8         |
| ADR/RID-Labels                                    | 8 (6.1)   |
| UN-No   | 2922      |
| Packaging group                                   | III       |
| orange warning plate                              | 86 / 2922 |
| Description of the goods (Technical name)         |           |
| CORROSIVE LIQUID, TOXIC, N.O.S. (cont. Cyanamide) |           |

**Sea transport IMDG-Code/GGVSee**

|                 |     |
|-----------------|-----|
| Class           | 8   |
| Subsidiary risk | 6.1 |

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UN-No 2922  
Packaging group III  
EmS F-A, S-B  
Proper technical name (Proper shipping name)  
CORROSIVE LIQUID, TOXIC, N.O.S. (cont. Cyanamide)

**Air transport ICAO-TI/IATA-DGR**

Class 8  
Subsidiary risk 6.1  
UN-No 2922  
Packaging group III  
Proper technical name (Proper shipping name)  
Corrosive liquid, toxic, n.o.s. (cont. Cyanamide)

**Inland waterway transport ADN/ADNR/GGVBinSch (Germany)**

Class 8  
ADR/RID-Labels 8 (6.1)  
UN-No / Substance number 2922  
Packaging group III  
Description of the goods (Technical name)  
CORROSIVE LIQUID, TOXIC, N.O.S. (cont. Cyanamide)

**Loading instructions/Remarks**

IATA\_C ERG-Code 8P  
IATA\_P ERG-Code 8P  
IMDG Clear of living quarters.

**Transport/further information**

Keep separate from foodstuffs, luxury foods, feedstuffs

**15. REGULATORY INFORMATION****Labelling according to EC Directives**

Statutory basis/list According to the Dangerous Preparations Directive (1999/45/EG):

**hazard-defining component(s)**

- cyanamide; carbamionitril

|                     |  |   |
|---------------------|--|---|
| <b>Symbol(s)</b>    | Xn<br>N  | Harmful<br>Dangerous for the environment  |
| <b>R-phrases(s)</b> | R21/22<br>R36/38<br>R43<br>R51/53              | Harmful in contact with skin and if swallowed.<br>Irritating to eyes and skin.<br>May cause sensitization by skin contact.<br>Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.               |
| <b>S-phrases(s)</b> | S 1/2<br>S 3<br>S14<br>S49<br>S23<br>S36/37/39 | Keep locked up and out of the reach of children.<br>Keep in a cool place.<br>Keep away from acids and bases.<br>Keep only in the original container.<br>Do not breathe spray.<br>Wear suitable protective clothing, gloves and eye/face |



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S46 protection.  
If swallowed, seek medical advice immediately and show this container or label.

Labelling of specific substances / preparations To avoid risks to man and the environment, comply with the instructions for use.

Do not contaminate water with the product or its container.

**National legislation****16. OTHER INFORMATION****registration**

|                        |                       |
|------------------------|-----------------------|
| Europe (EINECS/ELINCS) | listed/registered     |
| USA (TSCA)             | listed/registered     |
| Canada (DSL)           | listed/registered     |
| Australia (AICS)       | listed/registered     |
| Japan (MITI)           | listed/registered     |
| Korea (TCCL)           | listed/registered     |
| Philippines (PICCS)    | not listed/registered |
| China                  | listed/registered     |
| Switzerland            | listed/registered     |

**Risk phrase (R phrase) texts****• cyanamide; carbamonitril**

|        |  |
|--------|--|
| R25    | Toxic if swallowed.                      |
| R21    | Harmful in contact with skin.            |
| R36/38 | Irritating to eyes and skin.             |
| R43    | May cause sensitization by skin contact. |

**• orthophosphoric acid**

|     |               |
|-----|---------------|
| R34 | Causes burns. |
|-----|---------------|

**Further information**

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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