
Safety Data Sheet for use in USA dated 02/09/10

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Trade name: **KENTAN DF**
Trade code: SC529
Product type and use: Fungicide
EPA Reg. No.: 80289-2
Company: ISAGRO USA- 430 Davis Dr., Suite 240, Morrisville NC 27560
Subsidiary of: Isagro S.p.A. – Via Caldera, 21 – 20153 Milano, Italy
Emergency telephone numbers:
Isagro USA (919) 321-5200 / CHEMTREC (800) 421-9300

2. COMPOSITION/INFORMATION ON ACTIVE INGREDIENTS

40% - 42% (metallic copper) Copper Hydroxide technical
CAS: 20427-59-2

3. HAZARDS IDENTIFICATION

DANGER: Causes irreversible eye damage. Do not get in eyes or on clothing. Harmful if swallowed, absorbed through skin or if inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing dust.

4. FIRST AID MEASURES

Contact with skin:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes
- Call a poison control center or doctor for treatment advice.

Contact with eyes:

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

Swallowing:

- Call a poison control center or doctor immediately for treatment advice
- Have person sip a glass of water if able to swallow
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything to an unconscious person

Inhalation:

- Move person to fresh air
 - If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible
 - Call a poison control center or doctor for further treatment advice.
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5. FIRE-FIGHTING MEASURES

Recommended extinguishers:

Kentan DF is not flammable or explosive. Use water, CO₂, Foam, Chemical powders, according to the materials involved in the fire.

Extinguishers not to be used:

None in particular.

Risks arising from combustion:

Avoid inhaling the fumes.

Protective equipment:

Use minimally respiratory protection equipment cited in Section 8 and standard protection equipment according to the materials involved in the fire.

6. ACCIDENTAL RELEASE MEASURES

Measures for personal safety:

Use a mask, protective eyewear, gloves and protective clothing (see Section 8).

Environmental measures:

If the product has entered a waterway and/or drainage system, or has contaminated the ground and/or vegetation, notify the competent authorities.

Cleaning methods:

Rapidly recover the product and prevent it from entering into drainage systems, if possible. In so doing wear protective clothing (see Section 8). After the product has been recovered, rinse the area and contaminated materials involved with water. Dispose unrecoverable product, rinsate, or rinsate solids as hazardous substance (see Section 13).

7. HANDLING AND STORAGE

Handling precautions:

Avoid contact and inhalation of dust (see Section 8).

Do not eat, drink or smoke while working.

Incompatible materials:

None in particular.

Storage conditions:

Store in a cool, dry place

Instructions regarding storage premises:

Adequately ventilated premises.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary measures:

Give adequate ventilation to the premises where the product is stored and/or handled.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged, e.g., CEN/FFP-2(S) or CEN/FFP-3(S).

Protection for hands:

Use chemical resistant gloves made of waterproof material, such as polyvinyl chloride, nitrile rubber, or butyl rubber.

Eye protection:

Use close fitting safety goggles and/or visor conforming to BS 2092 GRADE 1.

Protection for skin:

Use coveralls (long sleeve shirt and pants) and shoes plus socks.

Exposure limit(s) (ACGIH):

None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	Light blue-green granules
Odour:	Odourless
pH:	8.8 - 9.0 (1% in water)
Flammability properties:	Not flammable
Explosive properties:	Not explosive
Bulk density (tap)	1.02 g/cc

10. STABILITY AND REACTIVITY

Conditions to avoid:

Stable under normal conditions.

Substances to avoid:

None in particular.

Hazardous decomposition products:

None.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

LD50 (oral): 944.6 mg/kg (rat)
LD50 (dermal): > 2000 mg/kg (rat)
LC50 (4h) (inhalation): 1.287 mg/L air

Irritation:

Skin: not irritant
Eye: Irritant

Sensitization:

Not sensitizing

Data referred to technical Copper Oxychloride and Copper Hydroxide:

Carcinogenic effects:
No carcinogenic effects.

Mutagenic effects:
No mutagenic effects.

Teratogenic effects:
No teratogenic effects.

12. ECOLOGICAL INFORMATION

List of substances dangerous for the environment and corresponding classification:

Data referred to technical Copper Oxychloride

Fish (*Onchorincus mykiss*): LC50 (96h): 0.0165 mg Cu/L
Freshwater invertebrate (*Daphnia magna*): LC50 (48h): 0.0422 mg Cu/L
Algae (*Scenedesmus Subspicatus*): EC50 (72h): 22.5 mg Cu/L

List of substances dangerous for the environment and corresponding classification:

Copper Hydroxide technical
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Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Recover, if possible. Send non-recoverable product, rinsate or rinsate solids to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

DOT-UN Number: N/A
DOT-Class: N/A
DOT-Shipping Name: N/A (pesticide-non regulated)
DOT-Label/Placard: N/A
DOT-Packing Group: N/A
DOT-Marine Pollutant: Yes [regulated only for bulk packaging and vessel (i.e. barge shipments) (49 CFR 171, 4(c)). In these cases follow IMDG information below for appropriate labeling and classification]

ADR/RID-UN Number: 3077
ADR/RID-Class: 9
ADR/RID-Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S.
ADR/RID-Label/Placard: 9
ADR/RID-Packing Group: III
AD/RID-Marine Pollutant: Yes (add description and Environmentally Hazardous Substance label for vessel shipment only)

IMDG-UN Number: 3077

IMDG-Class:	9
IMDG-Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (42% copper hydroxide)
IMDG-Label/Placard:	9 + Environmentally Hazardous Substance Label
IMDG-Packing Group:	III
IMDG-Marine Pollutant:	Yes (add to shipping paper and include % of ingredient)
IMDG-EmS:	F-A, S-F

15. REGULATORY INFORMATION

USEPA Registration Number 80289-2

16. OTHER INFORMATION

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended. This MSDS cancels and replaces any preceding release.