

DISSOLVINE NA2

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

Product Identifier Ethylenediaminetetraacetic acid, disodium salt, dihydrate, approx. 100%	
Supplier Akzo Nobel Chemicals (Ningbo) Co., Ltd. No.1801, Mid-Haitian Road, Xiepu Town, Zhenhai District, 315204, Ningbo Tel: +86 21 22205000	
Emergency telephone AkzoNobel Chemicals-Deventer-NL T +31 570 679211 F +31 570 679801 China National Registration Center for Chemicals phone +86 532 8388 9090 (fax +86 532 8378 6550)	
Relevant identified uses of the substance or mixture -adding chelates to liquid and solid formulations (EU : ES2) -use in industrial processes in which the chelates are consumed (EU :ES3) -Industrial use / Professional use : -in spraying formulations (EU :ES4) -in non-spraying formulations (EU :ES5) -in building and construction (EU :ES6) -use : in consumer products (EU :ES7)	
Date of last issue / Revision number 2013/07/05 / 1.00	

2. HAZARDS IDENTIFICATION

Classification according to 67/548/EEC as amended Xn; R20; Harmful by inhalation.
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GHS classification	
Description	Applicable
Acute toxicity (inhalation)	category 4
Acute toxicity (oral)	category 5

Pictogram(s) (GHS)



Signal word/Hazard statement(s) (GHS)	
Code	Description
Signal word: WARNING	
H303.	May be harmful if swallowed.
H332.	Harmful if inhaled.

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Precautionary statement(s) (GHS)	
Code	Description
P261a.	Avoid breathing dust .
P271.	Use only outdoors or in a well-ventilated area.
P304+P340.	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313.	IF exposed or concerned: Get medical advice/attention.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is to be considered as a substance in conformance to EC directives			
Information on hazardous ingredients			
Chemical description Ethylenediaminetetraacetic acid, disodium salt, dihydrate, approx. 100%			
Composition / information on ingredients			
Number	% w/w	CAS-number	Chemical name
1	89 - 91	000139-33-3	Ethylenediaminetetraacetic acid, disodium salt

Other information Balance: water
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4. FIRST AID MEASURES

Most important symptoms and effects No typical symptoms and effects known.	
Description of first aid measures	
General	IF exposed or concerned: Get medical advice/attention.
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing .
Skin	Take off contaminated clothing immediately. Wash immediately with soap and water. Launder clothes before reuse.
Eye	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation persists.
Ingestion	No special measures required.
Indication of any immediate medical attention and special treatment needed No additional information available	

5. FIRE-FIGHTING MEASURES

Extinguishing media waterspray, foam, Carbon dioxide, dry chemical powder
Unsuitable extinguishing media none known.
Hazardous decomposition / combustion products Nitrous gases may be produced
Protective equipment Use self-contained respiratory equipment.

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Fire and explosion hazard

In case of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see Section 8

Environmental precautions

Collect as much as possible in a clean container for (preferable) reuse or disposal.

Methods and material for containment and cleaning up

Flush remainder with water (Absorb the remainder with e.g. vermiculite). See section 13 .

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid dust generation. Avoid breathing dust .
Use only outdoors or in a well-ventilated area.

Fire and explosion prevention

In certain concentrations the product may form an explosive dust-air mixture.

Conditions for safe storage

none known.

Other information

Protect product from moisture and wet air. Keep container tightly closed and dry.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

for additional information : see : Annex.
Avoid dust generation.

Personal protection

Respiratory

for additional information : see : Annex.
In case of dust formation use dust mask. Dust exposure limits have to be respected.

Hand

for additional information : see : Annex.
For permanent (>480 minutes), full contact use, 100% nitrile gloves conforming to EN 374, e.g. KCL Dermatril 740 are recommended.
If used under conditions other than given above it is recommended that a supplier of CE approved gloves is contacted.
These recommendations are only applicable to the chemical as supplied by Akzo Nobel; if mixed with or dissolved in other substances please contact a supplier of CE approved gloves (e.g. KCL International +49 66 59870, fax +49 6659 87155).

Eye

for additional information : see : Annex.
The usual precautions for handling chemicals should be observed.

Skin and body

for additional information : see : Annex.
The usual precautions for handling chemicals should be observed.

Dust (general)

Time Weighted Average (TWA)

8 mg/m³ total dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

powder (25 °C)

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Color white
Odor odorless odor threshold: not determined
Boiling point/range not applicable
Melting point/freezing point Decomposes prior to melting.
Flash point not applicable
Flammability no
Explosive properties no
Oxidizing properties no
Vapor pressure not applicable
Density not applicable
Bulk density approx. 700 kg/m ³
Solubility in water approx. 100 g/l
Solubility in other solvents not determined
pH value 4 - 5 (1 % solution)
Partition coefficient n-octanol/water Log Pow < 0
Relative vapor density (air=1) not applicable
Viscosity not applicable
Autoignition temperature >200 °C (glowing temperatur of 5 mm product layer)
Upper/lower flammability or explosive limits Lower Explosion Limit >= 40 g/m ³
Decomposition temperature not determined

10. STABILITY AND REACTIVITY

Conditions to avoid Reaction with strong oxidizing agents. Product layer on hot surface might cause glowing or autoignition.
Chemical stability Stable under recommended storage and handling conditions (see section 7)
Incompatible materials none known.
Hazardous decomposition products Emits toxic fumes under fire conditions (nitrous gases (NO _x))

11. TOXICOLOGICAL INFORMATION

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Ethylenediaminetetraacetic acid, disodium salt
Acute toxicity
Oral LD50 2800 mg/kg (No guideline followed)
Dermal LD50 No data available
Inhalation LC50 1000 < 4-h-LC50 < 5000 mg/m ³ (similar to : OECD 403)
Summary of toxicological information The substance is a solid and not acutely toxic via the oral route. It is harmful following acute inhalation exposure. It is not irritating to skin and eyes. It is not a dermal sensitiser. In repeated long-term oral studies with EDTA compounds the overall NOAEL was about 500 mg/kg bw. The substance is not genotoxic or carcinogenic, Based on studies with other EDTA compounds, the substance is not classified for reproduction toxicity.
Germ cell mutagenicity Based on available data, the classification criteria are not met .
STOT - single exposure Conclusive but not sufficient for classification .
STOT - repeated exposure Conclusive but not sufficient for classification .
Aspiration hazards Not likely to occur (solid)
Irritation
Skin Non-irritating (OECD 404)
Eye Non-irritating (similar to : OECD 405)
Respiratory Non-irritating (Based on: acute inhalation test) (OECD 403)
Sensitization Not sensitizing (OECD 406)
Genotoxicity Based on "read-across" (Hydroxyethylethylenediaminetriacetic acid, trisodium salt): Ames test: Negative (OECD 471). Chromosome Aberration Test : Negative (OECD 473). Mouse Lymphoma test : Negative (OECD476). In vivo micronucleus test: Negative (OECD 474).
Chronic toxicity / Carcinogenicity oral: 90-day No Observed Adverse Effect Level (NOAEL): 500 mg/kg (general signs of toxicity ; No guideline followed) Based on "read-across" (Hydroxyethylethylenediaminetriacetic acid, trisodium salt): 104 week No Observed Adverse Effect Level (NOAEL) >= 500 mg/kg (No guideline followed) . inhalation: 5-day Lowest observable adverse effect concentration (LOAEC) : 30 mg/m ³ (respiratory tract pathology) (OECD 412). Reproductive toxicity: Based on "read-across" (Ethylenediaminetetraacetic acid, calcium-disodium complex): oral, NOAEL reproduction : >= 250 mg/kg (No guideline followed) . Based on "read-across" (several EDTA compounds) : developmental effects seen at high oral doses only . NOAEL development : was not established (No guideline followed) . Neurotoxicity test: No specific information available .

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Other toxicological information Chronic toxicity (Dermal): No data available

12. ECOLOGICAL INFORMATION

Ethylenediaminetetraacetic acid, disodium salt
Ecotoxicity
Ecotoxicological information Ethylenediaminetetraacetic acid, disodium salt: not dangerous to the environment . PBT or vPvB : no.
fish Based on "read-across" (several EDTA compounds): Lepomis macrochirus, 96-h-LC50 > 1000 mg/l (No guideline followed) Based on "read-across" (Ethylenediaminetetraacetic acid, calcium-disodium complex): Brachydanio rerio, 35-day No Observed Effect Concentration (NOEC) >= 25.7 mg/l (OECD 210)
daphnia Daphnia magna, 48-h-EC50: 140 mg/l (DIN 38412, 11) Daphnia magna, 21-day No Observed Effect Concentration (NOEC): 25 mg/l (Guideline : EEC XI/681/86, Draft : 4)
algae Based on "read-across" (Ethylenediaminetetraacetic acid, ferric-sodium complex): Desmodesmus subspicatus and Pseudokirchnerella subcapitata, 72-h-EC50 > 300 mg/l (OECD 201)
bacteria 30-min. EC20 > 500 mg/l (OECD 209)
Fate
Degradation Abiotic photodegradable; Half-life: 20 days. expected to be: resistant to hydrolysis .
Degradation Biotic EDTA (acid form) and its salts are not readily biodegradable. Under special conditions like adaptation or slightly alkaline pH, which is realistic under environmental surface water conditions, the biodegradability of EDTA is considerably enhanced and as such EDTA is considered ultimately biodegradable .
Bioaccumulation Lepomis macrochirus, Flow-through, 28-day, 1< Bio Concentration Factor (BCF) <2 (No guideline followed)
Other information No adsorption expected onto soil due to ionic structure. The test substance will preferentially distribute into the water compartment and not evaporate from the water surface .

13. DISPOSAL CONSIDERATIONS

Product According to local regulations.
Contaminated packaging No specific recommendations.

14. TRANSPORT INFORMATION

<i>Land transport</i>
Transport hazard class not restricted

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UN number not relevant
Proper Shipping Name not relevant

Sea transport (IMO / IMDG-code)	
Transport hazard class not restricted	
Packing group none	
UN number none	
EMS not relevant	
Marine pollutant no	
Proper Shipping Name not relevant	

Air transport (ICAO-TI / IATA-DGR)	
UN number none	
Transport hazard class not restricted	
Packing group none	
Proper Shipping Name not relevant	

15. REGULATORY INFORMATION

Product label name Ethylenediaminetetraacetic acid, disodium salt, dihydrate, approx. 100%
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Hazard classes	
Description	Applicable
Chinese Inventory	Listed on Chinese Existing Chemical Substances Inventory

R(isk) phrase(s) (EU classification)	
Code	Description
R20.	Harmful by inhalation.

S(afety) phrase(s) (EU classification)	
Code	Description
S22.	Do not breathe dust.

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Classification according to 67/548/EC as amended



HARMFUL (Xn)

Other information

Source of key data: IUCLID 5 datasheet:

16. OTHER INFORMATION

Relevant hazard statements

Chemical name

Hazard statement(s)
(GHS-classification)

History

**Date of printing/
pdf file generated**
2014/06/25

Revision
1.00

Composed by
E. C. Rietveld
M. Heus

Changes were made in section
all

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.