

SAFETY DATA SHEET

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

US / Z8

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Dissolvine E-Mn-13

Product Use Description : Chelating agent
Plant nutrient

Chemical characterization : Ethylenediaminetetraacetic acid, manganese dipotassium complex

Company : Akzo Nobel Functional Chemicals LLC
525 West Van Buren Street
Chicago IL 60607-3823
USA

Telephone : +18009067979

Fax : +13125447167

E-mail address : sds_chelates@akzonobel.com

Emergency telephone : Emergency AkzoNobel Chemicals-Deventer-NL T +31 570 679211

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	granular
Color	off-white
Odor	odorless
Hazard Summary	Risk of dust explosion.

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Potential Health Effects

Inhalation : Product dust may be irritating to respiratory system.

Skin : Product dust may be irritating to skin.

Eyes : Product dust may be irritating to eyes.

Ingestion : Not expected to be irritating.

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

US / Z8

Aggravated Medical Condition : None known.
Symptoms of Overexposure : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

Carcinogenicity:

IARC : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

US / Z8

3. COMPOSITION/INFORMATION ON INGREDIENTS

No hazardous ingredients

4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- Inhalation : Remove to fresh air.
Keep patient warm and at rest.
Rinse nose and mouth with water.
- Skin contact : Remove contaminated clothing and shoes.
Rinse with water.
- Eye contact : Rinse with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
- Ingestion : Clean mouth with water and drink afterwards plenty of water.
Never give anything by mouth to an unconscious person.

Notes to physician

- Symptoms : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.
- Treatment : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during fire fighting / Specific hazards arising from the chemical : Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.
- Combustion products : Fire will produce smoke containing hazardous combustion products (see section 10).
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
- Further information : Standard procedure for chemical fires.

See also Section 9. Physical and chemical properties: Safety data

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Avoid dust formation.
- Environmental precautions : No special environmental precautions required.
- Methods for cleaning up / : Sweep up and shovel.

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

US / Z8

Methods for containment : Keep in suitable, closed containers for disposal.

Additional advice : For personal protection see section 8.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : For personal protection see section 8.
Avoid creating dust.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
No special handling advice required.

Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.
No sparking tools should be used.

Storage

Requirements for storage areas and containers : Keep in a dry place.
Store at room temperature in the original container.
Keep container tightly closed.

Advice on common storage : No special restrictions on storage with other products.

Other data : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Contains no substances with occupational exposure limit values.

Engineering measures

Provide appropriate exhaust ventilation at places where dust is formed.

Personal protective equipment

Eye/face protection : Safety glasses

Hand protection : Glove material: Nitrile rubber

Respiratory protection : No personal respiratory protective equipment normally required.
In the case of dust, vapor or aerosol formation use respirator with an approved filter.
Half mask with a particle filter P2 (EN 143)

Hygiene measures : General industrial hygiene practice.

Environmental exposure controls

General advice : No special environmental precautions required.

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

US / Z8

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	: granular
Color	: off-white
Odor	: odorless
Odor Threshold	: Not applicable

Safety data

pH	: 6 - 7 1% (water)
Melting point	: Decomposes before melting.
Boiling point/boiling range	: Not applicable
Flash point	: Not applicable
Ignition temperature	: ≥ 200 °C Method: Auto-ignition of a 5mm dust layer according to EN 50281-2-1
Evaporation rate	: Not applicable
Flammability (solid, gas)	: Not classified as a flammability hazard
Lower explosion limit	: ≥ 40 g/m ³
Upper explosion limit	: Not applicable
Vapor pressure	: Not applicable
Relative vapor density	: Not applicable
Relative density	: No data available
Bulk density	: 600 - 800 kg/m ³
Water solubility	: ca. 800 g/l
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: log Pow: < 0
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Explosive properties	: Not explosive
Oxidizing properties	: Not classified as oxidizing.

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

US / Z8

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

10. STABILITY AND REACTIVITY

Conditions to avoid	: None known.
Materials to avoid	: None known.
Hazardous decomposition products	: Carbon oxides nitrogen oxides (NOx)
Thermal decomposition	: No data available
Reactivity	: Stable under normal conditions.
Chemical stability	: Stable under recommended storage conditions.
Hazardous reactions	: Dust may form explosive mixture in air.

11. TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION:

Toxicology Assessment

Further information : No further data available.

Carcinogenicity:

IARC	: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

12. ECOLOGICAL INFORMATION

PRODUCT INFORMATION:

Ecotoxicology Assessment

Additional ecological information : None known.

Further information on ecology

Hazardous to the ozone layer

Regulation : 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

US / Z8

Remarks : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

13. DISPOSAL CONSIDERATIONS

Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

International Regulation

ADR

Not regulated as a dangerous good

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Further information for transport

Not classified as dangerous in the meaning of transport regulations.

Domestic regulation

49 CFR

Not regulated as a dangerous good

TDG

Not regulated as a dangerous good

NOM-002-SCT

Not regulated as a dangerous good

15. REGULATORY INFORMATION

Notification status

CH INV : NO. Not in compliance with the inventory
TSCA : NO. This product either contains a chemical substance that is not listed on the public TSCA Inventory or the TSCA Inventory status of the product has not been evaluated.
DSL : NO. This product contains the following components that are not on the Canadian DSL nor NDSL.
AICS : NO. Not in compliance with the inventory
NZIoC : YES. On the inventory, or in compliance with the inventory
ENCS : NO. Not in compliance with the inventory
ISHL : NO. Not in compliance with the inventory
KECI : NO. Not in compliance with the inventory
PICCS : NO. Not in compliance with the inventory

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

US / Z8

IECSC : NO. Not in compliance with the inventory

For explanation of abbreviations, see section 16.

TSCA list : Not relevant

OSHA Hazards : Combustible dust

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals subject to disclosure and listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Ethylenediaminetetraacetic acid, manganese-disodium complex	15375-84-5	90 - 100 %
Water	7732-18-5	5 - 10 %

New Jersey Right To Know

Ethylenediaminetetraacetic acid, manganese-disodium complex	15375-84-5	90 - 100 %
Water	7732-18-5	5 - 10 %

California Prop. 65

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

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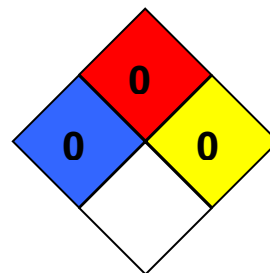
This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information

HMIS Classification : Health Hazard: 0
Flammability: 0
Physical hazards: 0

NFPA Classification : Health Hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0



Notification status explanation

REACH	1907/2006 (EU)
CH INV	Switzerland. New notified substances and declared preparations
TSCA	United States TSCA Inventory
DSL	Canadian Domestic Substances List (DSL)
AICS	Australia Inventory of Chemical Substances (AICS)
NZIoC	New Zealand. Inventory of Chemical Substances
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory
ISHL	Japan. ISHL - Inventory of Chemical Substances
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances (PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)

Further information

Revision Date 04/25/2015

The information in this material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the context of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current. No warranty is made as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

The information provided in this Material 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

Dissolvine E-Mn-13

Version 1

Revision Date 04/25/2015

Print Date 05/15/2015

US / Z8

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.