

# SAFETY DATA SHEET

according to the Globally Harmonized System and Canadian regulation

# **Dissolvine E-Mg-6**

Version 2 Revision Date 01/17/2018 Print Date 07/26/2018 CA / EN

#### 1. IDENTIFICATION

Product name : Dissolvine E-Mg-6

Product Use Description : Specific use(s): Chelating agent

Plant nutrient

Company : Akzo Nobel

Functional Chemicals B.V.

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: 国家化学事故应急响应中心 +86 532 8388 9090

#### 2. HAZARDS IDENTIFICATION

### **Emergency Overview**

Appearance	granular
Colour	white
Odour	odourless
Hazard Summary	Risk of dust explosion.

### **GHS Classification**

Combustible dust, Category 1

### **GHS** label elements

Signal word : Warning

Hazard statements : May form combustible dust concentrations in air.

Carcinogenicity:

IARC : No component 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 component of this product present at levels greater than or

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**ACGIH** 

equal to 0.1% is on OSHA's list of regulated carcinogens.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name : Ethylenediaminetetraacetic acid, magnesium disodium

complex

Pure substance/mixture No hazardous ingredients

Substance

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. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Specific hazards during firefighting / 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 firefighters

: 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, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.

Emergency measures on

accidental release

: Follow safe handling advice and personal protective

equipment recommendations.

Environmental precautions : No special environmental precautions required.

Methods for cleaning up / Methods for containment

: Sweep up and shovel.

Keep in suitable, closed containers for disposal.

Reference to other sections : For disposal considerations see section 13.

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.

#### Appropriate engineering controls

Provide appropriate exhaust ventilation at places where dust is formed.

### Personal protective equipment

Eye/face protection : Safety glasses

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Hand protection : Glove material: Nitrile rubber

Respiratory protection : No personal respiratory protective equipment normally

required.

In the case of dust, vapour or aerosol formation use a

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.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Form : granular

Colour : white

Odour : odourless

Odour Threshold : Not applicable

Safety data

pH : 6.5 - 7 1% (water)

Melting point : Decomposes before melting.

Boiling point/boiling range : Not applicable

Flash point : Not applicable

Ignition temperature :  $>= 200 \, ^{\circ}\text{C}$ 

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

Flammability (liquids) : Not applicable

Lower explosion limit : >= 40 g/m3

Upper explosion limit : Not applicable

Vapour pressure : Not applicable

Relative vapour density : Not applicable

Relative density : No data available

Bulk density : 600 - 800 kg/m3

Water solubility : ca. 900 g/l

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Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: log Pow: < 0

Auto-ignition 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 oxidising.

This 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

: Carbon oxides

products

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:**

**Hazard Summary** 

Acute toxicity : Not classified based on available information.

Skin corrosion/irritation : Not classified based on available information.

Serious eye damage/eye

Respiratory or skin

irritation

sensitisation

Not classified based on available information.

Respiratory sensitisation: Not classified based on available

information.

Skin sensitisation: Not classified based on available

information.

Germ cell mutagenicity : Not classified based on available information.

Carcinogenicity : Not classified based on available information.

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Reproductive toxicity : Not classified based on available information.

STOT - single exposure : Not classified based on available information.

STOT - repeated exposure : Not classified based on available information.

Aspiration hazard : Not classified based on available information.

**Potential Health Effects** 

Inhalation : Product dust may be irritating to the respiratory system.

Skin : Product dust may be irritating to skin.

Eyes : Product dust may be irritating to eyes.

Ingestion : Not expected to be irritating.

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.

**Toxicology Assessment** 

Further information : No further data available.

Test result

Acute inhalation toxicity : LC50 (Rat): > 5.16 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 436

Assessment: The substance or mixture has no acute

inhalation toxicity Read-across (Analogy)

Skin irritation : Result: No skin irritation

Method: OECD Test Guideline 439

Eye irritation : Result: No eye irritation

Method: OECD Test Guideline 437

Sensitisation : Species: Mouse

Result: Does not cause skin sensitisation. Method: OECD Test Guideline 429

Read-across (Analogy)

Repeated dose toxicity : Species: Rat

NOAEL: >= 250 mg/kg Application Route: Oral Exposure time: two year Read-across (Analogy)

Species: Rat NOAEL: 0.42 mg/l

Application Route: Inhalation

Test atmosphere: dust/mist Exposure time: 42 days Read-across (Analogy)

Germ cell mutagenicity

Genotoxicity in vitro : Ames test

Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471

Read-across (Analogy)

Genotoxicity in vivo : In vivo micronucleus test

Species: Mouse

Method: OECD Test Guideline 474

Result: negative Read-across (Analogy)

Carcinogenicity : Species: Rat

Application Route: Oral Exposure time: two year Result: no effects Read-across (Analogy)

Reproductive toxicity : Test Type: Three-generation study

Species: Rat

Application Route: Oral NOAEL: >= 250 mg/kg, F1: >= 250 mg/kg, Read-across (Analogy)

Reproductive : Species: Rat

toxicity/Development/Teratog

enicity

Application Route: Oral

Duration of Single Treatment: 168 h

General Toxicity Maternal: Lowest observed adverse effect

level: 1,340 mg/kg body weight

Developmental Toxicity: 1,340 mg/kg body weight

Read-across (Analogy)

Target Organ Systemic Toxicant - Single exposure Not classified due to data which are conclusive although

insufficient for classification.

Target Organ Systemic

Toxicant - Repeated

exposure

: Not classified due to data which are conclusive although

insufficient for classification.

Aspiration toxicity : Not classified due to data which are conclusive although

insufficient for classification.

Carcinogenicity:

IARC : No component 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 component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

ACGIH : No component 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.

Test result

**Ecotoxicity effects** 

Toxicity to fish : LC50: > 100 mg/l

Exposure time: 96 h

Species: Lepomis macrochirus (Bluegill sunfish)

Test Type: Fresh water Read-across (Analogy)

Toxicity to daphnia and other

aquatic invertebrates

: EC50: > 100 mg/l

Exposure time: 48 h

Species: Daphnia magna (Water flea)

Test Type: Fresh water

Method: OECD Test Guideline 202

Read-across (Analogy)

Toxicity to algae : EC50: > 100 mg/l

Exposure time: 72 h

Species: Pseudokirchneriella subcapitata (algae)

Test Type: Fresh water

Method: OECD Test Guideline 201

Read-across (Analogy)

Toxicity to fish (Chronic

toxicity)

: NOEC: > 25.7 mg/l Exposure time: 35 d

Species: Danio rerio (zebra fish) Test Type: flow-through test Method: OECD Test Guideline 210

Read-across from supporting substance (structural analogue

or surrogate).

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

NOEC: 25 mg/l Exposure time: 21 d reproduction rate

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Method: OECD Test Guideline 211

Read-across from supporting substance (structural analogue

or surrogate).

Elimination information (persistence and degradability)

Bioaccumulation : Not expected considering the low log Pow value.

Mobility : Adsorption to the solid soil particles is not expected.

Biodegradability : Not readily biodegradable, but will degrade after a longer

period.

#### Further information on ecology

Biochemical Oxygen : No data available

Demand (BOD)

#### 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 Regulations**

#### 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.

### **National Regulations**

#### 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

DSL	: YES. All components of this product are on the Canadian DSL
AICS	: YES. On the inventory, or in compliance with the inventory
NZIoC	: YES. On the inventory, or in compliance with the inventory
ENCS	: YES. On the inventory, or in compliance with the inventory
ISHI	YES On the inventory or in compliance with the inventory

KECI: NO. Not in compliance with the inventory

PICCS : YES. On the inventory, or in compliance with the inventory IECSC : YES. On the inventory, or in compliance with the inventory TCSI : YES. On the inventory, or in compliance with the inventory

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TSCA: YES. All chemical substances in this product are either listed on the

TSCA Inventory or in compliance with a TSCA Inventory exemption.

For explanation of abbreviation see section 16.

#### Canadian lists

Canadian Environmental Protection Act - National Pollutant Release Inventory
Canadian National Pollutant Release Inventory (NPRI): No component is listed on NPRI.

Canada. CEPA 1999 Significant New Activity (SNAc) List

No substances are subject to a Significant New Activity Notification.

#### **16. OTHER INFORMATION**

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS -Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China: IMDG - International Maritime Dangerous Goods: IMO -International Maritime Organization: ISHL - Industrial Safety and Health Law (Japan): ISO -International Organisation for Standardization: KECI - Korea Existing Chemicals Inventory: LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC -New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

#### **Further information**

**HMIS Classification** : Health hazard: 1

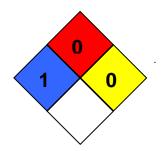
Chronic Health Hazard: /

Flammability: 0 Physical hazards: 0

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NFPA Classification : Health hazard: 1

Fire Hazard: 0 Reactivity Hazard: 0



#### Notification status explanation

REACH 1907/2006 (EU)

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)

TCSI Taiwan Chemical Substance Inventory (TCSI)

TSCA United States TSCA Inventory

#### **Further information**

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The information in this material safety data sheet should be provided 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.

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