

SAFETY DATA SHEET

according to the Globally Harmonized System and Canadian regulation

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

CA / EN

1. IDENTIFICATION

Product name : Dissolvine D-Fe-6

Product Use Description : Specific use(s): Plant nutrient

Company : Akzo Nobel
Functional Chemicals B.V.
Velperweg 76
Arnhem 6824 BM
Netherlands

Telephone : +31263664433

Fax : +31263665830

E-mail address : sds_chelates@akzonobel.com

Emergency telephone number : 24 hours:+31 57 06 79211, CHEMTREC-USA:1-800-424-9300, CHEMTREC outside USA +1-703-527-3887, CANUTEC-CANADA:1-613-996-6666, 化学事故应急咨询电话 : 国家化学事故应急响应中心 +86 532 8388 9090

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	red brown
Odour	odourless

GHS Classification

Corrosive to metals, Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H290 May be corrosive to metals.

Precautionary statements : **Prevention:**
P234 Keep only in original packaging.
Response:
P390 Absorb spillage to prevent material damage.

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

CA / EN

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.

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

CA / EN

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name	:	Diethylenetriaminepentaacetic acid, ferric diammonium complex, 53% aqueous solution
Pure substance/mixture	:	Mixture
No hazardous ingredients	:	

4. FIRST AID MEASURES

General advice	:	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.
Inhalation	:	If breathed in, move person into fresh air.
Skin contact	:	Take off contaminated clothing and shoes immediately. Rinse immediately with plenty of water.
Eye contact	:	Rinse with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
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	:	Water spray may be ineffective unless used by experienced firefighters.
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 : Use personal protective equipment.
Ensure adequate ventilation.
- Emergency measures on accidental release : Evacuate personnel to safe areas.
Only qualified personnel equipped with suitable protective equipment may intervene.
Prevent unauthorised persons entering the zone.
- Environmental precautions : Try to prevent the material from entering drains or water courses.
- Methods for cleaning up /
Methods for containment : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
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.
Smoking, eating and drinking should be prohibited in the application area.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place.
Store in closed dark containers made of anti-corrosive material.
Keep only in original container.
- Maximum storage temperature: : 40 °C
- 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

Effective exhaust ventilation system

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

CA / EN

Personal protective equipment

- Eye/face protection : Tightly fitting safety goggles
- Skin and body protection : Protective suit
- Respiratory protection : In the case of vapour or aerosol formation use a respirator with an approved filter.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of workday.

Environmental exposure controls

- General advice : Try to prevent the material from entering drains or water courses.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

- Form : liquid
- Colour : red brown
- Odour : odourless
- Odour Threshold : Not applicable

Safety data

- pH : 6 - 7 1% (water)
- Melting point : Not applicable
- Boiling point/boiling range : 105 - 110 °C
- Flash point : not (in)flammable Product is not flammable (aqueous)
- Evaporation rate : No data available
- Flammability (solid, gas) : Not applicable
- Flammability (liquids) : Not classified as a flammability hazard
- Lower explosion limit : Not applicable
- Upper explosion limit : Not applicable
- Vapour pressure : similar to water
- Relative vapour density : similar to water
- Relative density : 1.15 - 1.38
- Bulk density : Not applicable

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

CA / EN

Water solubility	: completely miscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: log Pow: < 0
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, dynamic	: 10.5 mPa.s at 20 °C
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: Not classified as oxidising.
Corrosive to metals	: Corrosive to metals

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	: Copper Aluminium Zinc Copper alloys Nickel
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	: No dangerous reaction known under conditions of normal use.

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 irritation	: Not classified based on available information.
Respiratory or skin	: Respiratory sensitisation: Not classified based on available

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

CA / EN

sensitisation 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.

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 : Not expected to be irritating.

Skin : Not expected to be irritating.

Eyes : Not expected to be irritating.

Ingestion : May cause irritation of the mucous membranes.

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 oral toxicity : LD50: > 5,000 mg/kg
Species: Rat
Method: OECD Test Guideline 423

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

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

CA / EN

Additional ecological information : None known.

Test result

Ecotoxicity effects

Toxicity to fish : LC50: > 100 mg/l
Exposure time: 96 h
Species: Danio rerio (zebra fish)
Read-across (Analogy)

Elimination information (persistence and degradability)

Bioaccumulation : Not expected considering the low log Pow value.

Mobility : No data available

Biodegradability : Result: Not readily biodegradable.

Further information on ecology

Biochemical Oxygen Demand (BOD) : No data available

13. DISPOSAL CONSIDERATIONS

Product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Hazardous waste
Dispose of contents/container in accordance with local regulation.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.

14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 1760
Proper shipping name : Corrosive liquid, n.o.s.
(Diethylenetriaminepentaacetic acid, ferric-diammonium complex)
Class : 8
Packing group : III
Labels : 8
Packing instruction (cargo aircraft) : 856
Packing instruction (passenger aircraft) : 852
Packing instruction (LQ) : Y841
Environmentally hazardous : no

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

CA / EN

IMDG-Code

UN number : UN 1760
Proper shipping name : CORROSIVE LIQUID, N.O.S.
(Diethylenetriaminepentaacetic acid, ferric-diammonium complex)
Class : 8
Packing group : III
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : no

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

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

TDG

UN number : UN 1760
Proper shipping name : CORROSIVE LIQUID, N.O.S.
(Diethylenetriaminepentaacetic acid, ferric-diammonium complex)
Class : 8
Packing group : III
Labels : 8
ERG Code : 154
Marine pollutant : no

15. REGULATORY INFORMATION

Notification status

NDSL : YES. This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL. Diethylenetriaminepentaacetic acid, ferric-diammonium complex
AICS : YES. On the inventory, or in compliance with the inventory
ENCS : YES. On the inventory, or in compliance with the inventory
ISHL : YES. On the inventory, or in compliance with the inventory
KECI : YES. On the inventory, or 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
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

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

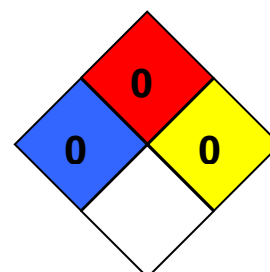
CA / EN

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: 0
Chronic Health Hazard: /
Flammability: 0
Physical hazards: 0

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



Notification status explanation

REACH 1907/2006 (EU)
NDSL Canadian Non-Domestic Substances List (NDSL)

Dissolvine D-Fe-6

Version 1

Revision Date 01/12/2018

Print Date 10/04/2018

CA / EN

AICS	Australia Inventory of Chemical Substances (AICS)
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

Revision Date 01/12/2018

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.

The information provided in this 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 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.