# SAFETY DATA SHEET

according to the Globally Harmonized System and Canadian regulation

**Dissolvine Q40**

**1. IDENTIFICATION**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Dissolvine Q40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Use Description</td>
<td>Specific use(s): Plant nutrient</td>
</tr>
<tr>
<td>Company</td>
<td>Akzo Nobel Functional Chemicals B.V. Velperweg 76 Arnhem 6824 BM Netherlands</td>
</tr>
<tr>
<td>Telephone</td>
<td>+31263664433</td>
</tr>
<tr>
<td>Fax</td>
<td>+31263665830</td>
</tr>
<tr>
<td>E-mail address</td>
<td><a href="mailto:sds_chelates@akzonobel.com">sds_chelates@akzonobel.com</a></td>
</tr>
<tr>
<td>Emergency telephone</td>
<td>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</td>
</tr>
</tbody>
</table>

**2. HAZARDS IDENTIFICATION**

**Emergency Overview**

<table>
<thead>
<tr>
<th>Appearance</th>
<th>granular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>red brown</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Hazard Summary</td>
<td>Risk of dust explosion.</td>
</tr>
</tbody>
</table>

**GHS Classification**

Combustible dust, Category 1

**GHS label elements**

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements</td>
<td>May form combustible dust concentrations in air.</td>
</tr>
</tbody>
</table>

**Carcinogenicity:**

<table>
<thead>
<tr>
<th>IARC</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA</td>
<td>No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.</td>
</tr>
</tbody>
</table>
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.
3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name: Ethylenediaminebis[(2-hydroxyphenyl)acetic acid], ferric sodium complex
Pure substance/mixture: Mixture
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. 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
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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>granular</td>
</tr>
<tr>
<td>Colour</td>
<td>red brown</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**Safety data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7 - 9 1% (water)</td>
</tr>
<tr>
<td>Melting point</td>
<td>Decomposes before melting.</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not classified as a flammability hazard</td>
</tr>
<tr>
<td>Flammability (liquids)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>&gt;= 40 g/m3</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>500 - 700 kg/m3</td>
</tr>
<tr>
<td>Water solubility</td>
<td>ca. 50 g/l</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-</td>
<td>log Pow: &lt; 0</td>
</tr>
</tbody>
</table>
octanol/water

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 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:

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 sensitisation : 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.
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 oral toxicity : LD50: > 2,000 mg/kg
Species: Rat
The substance or mixture has no acute oral toxicity

**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: Danio rerio (zebra fish)
Elimination information (persistence and degradability)
Bioaccumulation : Bioaccumulation is unlikely.
Mobility : Adsorption to the solid soil particles is not expected.
Biodegradability : Result: Not readily biodegradable.

Further information on ecology
Biochemical Oxygen Demand (BOD) : No data available

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 : q (quantity restricted). This product contains one or several components that are not on the Canadian DSL nor NDSL.
AICS : YES. On the inventory, or in compliance with the inventory
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: 0
- Chronic 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)
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

Revision Date 12/01/2017

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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