

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Reference number: Annex VI Issue date: 6/27/2017 Revision date: 2/4/2021 Supersedes version of: 9/13/2019 Version: 3.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Trade name	: Iron 6%
Chemical name	: Diethylenetriamine pentaacetic acid, diammonium iron complex, 53% aqueous solution
Product code	: 37000
Synonyms	: Dissolvine D-FE-6, Diammonium iron complex

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

### 1.2.1. Relevant identified uses Use of the substance/mixture

: Nutrient for plants, fertilizer

### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Breustedt Chemie B.V. IJsseldijk 28 7325 WZ Apeldoorn - Nederland T 055-5332844 productinfo@breustedt.nl - www.breustedt.nl

### 1.4. Emergency telephone number

#### Emergency number

: +31(0)30-2748888 Nationaal Vergiftigingen Informatie Centrum (NVIC) (uitsluitend bestemd om artsen te informeren bij accidentele vergiftigingen)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] H290 Corrosive to metals, Category 1 Full text of H statements : see section 16 Adverse physicochemical, human health and environmental effects No additional information available 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms (CLP) GHS05 Signal word (CLP) : Warning Hazard statements (CLP) : H290 - May be corrosive to metals. Precautionary statements (CLP) : P234 - Keep only in original container. P390 - Absorb spillage to prevent material damage.

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Diethylenetriamine pentaacetic acid, diammonium iron complex		6	Met. Corr. 1, H290
Full text of H-statements: see section 16		·	

### 3.2. Mixtures

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	3
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Wash with plenty of water.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: If swallowed, rinse mouth. Never allow an unconscious person to drink or eat.
4.2. Most important symptoms and e	ffects, both acute and delayed
No additional information available	
4.3. Indication of any immediate med	ical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Water spray.		
5.2. Special hazards arising from the substance or mixture			
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO2).		
5.3. Advice for firefighters			
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus. Complete protective clothing.		

SECTION 6: Accidental release measures		
6.1. Personal precautions, prote	ctive equipment and emergency procedures	
6.1.1. For non-emergency personnel		
Protective equipment	: 8.2. Exposure controls/personal protection.	
6.1.2. For emergency responders		
No additional information available		

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

6.2. Environmental precautions	
Do not allow to enter drains or water course	ès.
6.3. Methods and material for conta	inment and cleaning up
For containment	: Absorb the product onto porous material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Methods for cleaning up	: Clean contaminated surfaces with an excess of water.
6.4. Reference to other sections	

See Heading 8.

SECTION 7: Handling and stor	age
7.1. Precautions for safe handling	
Precautions for safe handling	: Do not eat, drink or smoke when using this product.
7.2. Conditions for safe storage, in	ncluding any incompatibilities
Storage conditions Storage temperature Special rules on packaging Packaging materials	<ul> <li>Keep only in original container.</li> <li>&lt; 40 °C</li> <li>Keep only in original container.</li> <li>Store in {0 message=<specify a="" compatible="" container="" corrosive="" inner="" li="" liner.<="" materials="" resistant="" with=""> </specify></li></ul>

### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

No additional information available

#### 8.2.2. Personal protection equipment

### Personal protective equipment:

Protective clothing. Gloves. Safety glasses. Personal protective equipment symbol(s):



### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 8.2.2.1. Eye and face protection

Eye protection:			
Chemical goggles or safety glasses			
Туре	Field of application	Characteristics	Standard
Safety goggles		Protective goggles	EN 166

### 8.2.2.2. Skin protection

Skin and body protection:	
Wear suitable protective clothing	

Hand protection:					
protective gloves					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR), Butyl rubber, PVC gloves, Natural rubber	6 (> 480 minutes)			EN ISO 374

Other skin protection Materials for protective clothing:	
Protective clothing	

### 8.2.2.3. Respiratory protection

Respiratory protection:			
In case of inadequate ventilation wear respiratory protection.			
Device Filter type Condition Standard			
Breathing equipment		Vapour protection	

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

### SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state Colour Odour Odour threshold pH Relative evaporation rate (butylacetate=1) Melting point Freezing point Boiling point Elash point	<ul> <li>Liquid</li> <li>brown.</li> <li>Odourless.</li> <li>No data available</li> <li>6 - 7 1% (water)</li> <li>No data available</li> <li>No data available</li> <li>No data available</li> <li>No data available</li> <li>105 - 110 °C</li> <li>No data available</li> </ul>
Flash point	No data available
Auto-ignition temperature	No data available

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Flammability (solid, gas) Vapour pressure Relative vapour density at 20 °C Relative density Density Solubility Partition coefficient n-octanol/water (Log Pow) Viscosity, kinematic Viscosity, dynamic Explosive properties	<ul> <li>No data available</li> <li>1.15 - 1.38</li> <li>Water solubility.</li> <li>No data available</li> </ul>
Explosive limits	: No data available

### 9.2. Other information

Additional information

: Corrosive to metals

ECTION 10: Stability and reactivity
0.1. Reactivity
able under normal conditions.
).2. Chemical stability
able under normal conditions.
).3. Possibility of hazardous reactions
dangerous reactions known under normal conditions of use.
0.4. Conditions to avoid
additional information available
).5. Incompatible materials
iminium. zinc. Nickel, copper alloys. copper.
).6. Hazardous decomposition products

Carbon oxides, nitrogen oxides (NOx).

SECTION 11: Toxicological info	rmation	
11.1 Information on toxicological et	ffects	
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
Skin corrosion/irritation	: Not classified	
	pH: 6 – 7 1% (water)	
Serious eye damage/irritation	: Not classified	
	pH: 6 – 7 1% (water)	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
2/4/2021 (Povision date)	EN (Englich)	5/10

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: No data available

SECTION 12: Ecological information	
12.1. Toxicity	
Hazardous to the aquatic environment, short-term : (acute)	<ul> <li>The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.</li> <li>Not classified</li> <li>Not classified</li> </ul>
12.2. Persistence and degradability	
Iron 6%	
Persistence and degradability	Not readily biodegradable.
12.3. Bioaccumulative potential	
Iron 6%	
Bioaccumulative potential	not bioaccumulable.
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	
No additional information available	
12.6. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Regional legislation (waste) Waste treatment methods Product/Packaging disposal recommendations	<ul> <li>Disposal must be done according to official regulations.</li> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.</li> </ul>

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID				
ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number	·	·		
UN 1760	UN 1760	UN 1760	UN 1760	UN 1760

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

14.2. UN proper shippin	g name			
CORROSIVE LIQUID, N.O.S.	CORROSIVE LIQUID, N.O.S.	Corrosive liquid, n.o.s. (Diethylenetriaminepentaac	CORROSIVE LIQUID, N.O.S.	CORROSIVE LIQUID, N.O.S.
(Diethylenetriaminepentaac	(Diethylenetriaminepentaac	etic acid, ferric-	(Diethylenetriaminepentaac	(Diethylenetriaminepentaac
etic acid, ferric-	etic acid, ferric-	diammonium complex)	etic acid, ferric-	etic acid, ferric-
diammonium complex)	diammonium complex)		diammonium complex)	diammonium complex)
Transport document descr	iption			
UN 1760 CORROSIVE	UN 1760 CORROSIVE	UN 1760 Corrosive liquid,	UN 1760 CORROSIVE	UN 1760 CORROSIVE
LIQUID, N.O.S.	LIQUID, N.O.S.	n.o.s.	LIQUID, N.O.S.	LIQUID, N.O.S.
(Diethylenetriaminepentaac	(Diethylenetriaminepentaac	(Diethylenetriaminepentaac	(Diethylenetriaminepentaac	(Diethylenetriaminepentaac
etic acid, ferric- diammonium complex), 8,	etic acid, ferric- diammonium complex), 8,	etic acid, ferric- diammonium complex), 8,	etic acid, ferric- diammonium complex), 8,	etic acid, ferric- diammonium complex), 8,
III, (E)	III	III	III	III
14.3. Transport hazard o	class(es)			
8	8	8	8	8
$\bigtriangleup$	$\bigtriangleup$	$\bigtriangleup$	$\bigtriangleup$	$\bigtriangleup$
8	8	8	8	8
	•	•	•	
14.4. Packing group				
	III	III	III	III
14.5. Environmental haz	ards	1		
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the
environment : No	environment : No Marine pollutant : No	environment : No	environment : No	environment : No
	·			
No supplementary informatic	on available			
14.6. Special precaution	s for user			
Special transport precautions	: Co	rrosive to metals		
Overland transport				
Classification code (ADR)	: C9			
Special provisions (ADR)	: 274	4		
Limited quantities (ADR)	: 51			
Excepted quantities (ADR)	: E1			
Packing instructions (ADR) Mixed packing provisions (AD		01, IBC03, LP01, R001		
Portable tank and bulk contain		15		
Portable tank and bulk contain		1, TP28		
(ADR)				
Tank code (ADR) Vehicle for tank carriage	: L4I : AT			
Venicle for tank carriage: AITransport category (ADR): 3				
Special provisions for carriage - Packages (ADR) : V12		2		
Hazard identification number (Kemler No.) : 80				
Orange plates : 80 1760				
Tunnel restriction code (ADR)	) : E			
EAC code	: 2X			
APP code	: B			
Transport by sea				
		3, 274 01, LP01		

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
Properties and observations (IMDG)	: Causes burns to skin, eyes and mucous membranes.
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L
Inland waterway transport	
Classification code (ADN)	: C9
Special provisions (ADN)	: 274
Limited quantities (ADN)	: 5L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: Т
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: C9
Special provisions (RID)	: 274
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1, TP28
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

#### Not applicable

### SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Iron 6% is not on the REACH Candidate List

Iron 6% is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

Iron 6% is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

#### Germany

Water hazard class (WGK)

: Not classified according to Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV)

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hazardous Incident Ordinance (12. BImSchV) Netherlands	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
ABM category	: A(4) - low hazard for aquatic organisms, may have longterm hazardous effects in aquatic environment
SZW-lijst van kankerverwekkende stoffen	: The substance is not listed
SZW-lijst van mutagene stoffen	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: The substance is not listed
Denmark	
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product
15.2. Chemical safety assessment	

No additional information available

### SECTION 16: Other information

Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
РВТ	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant

### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SDSSafety Data SheetVPVBVery Persistent and Very BioaccumulativeBLVBiological limit valueBODBiochemical oxygen demand (BOD)CODChemical oxygen demand (COD)EC-No.European Community numberENEuropean StandardIOELVIndicative Occupational Exposure Limit ValueN.O.S.Not Otherwise SpecifiedOELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassChemical Abstract Service number		
vPvBVery Persistent and Very BioaccumulativeBLVBiological limit valueBODBiochemical oxygen demand (BOD)CODChemical oxygen demand (COD)EC-No.European Community numberENEuropean StandardIOELVIndicative Occupational Exposure Limit ValueN.O.S.Not Otherwise SpecifiedOELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKKater Hazard ClassCAS-No.Chemical Abstract Service number	TLM	Median Tolerance Limit
BLVBiological limit valueBODBiochemical oxygen demand (BOD)CODChemical oxygen demand (COD)EC-No.European Community numberENEuropean StandardIOELVIndicative Occupational Exposure Limit ValueN.O.S.Not Otherwise SpecifiedOELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassChemical Abstract Service number	SDS	Safety Data Sheet
BODBiochemical oxygen demand (BOD)CODChemical oxygen demand (COD)EC-No.European Community numberENEuropean StandardIOELVIndicative Occupational Exposure Limit ValueN.O.S.Not Otherwise SpecifiedOELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassCAS-No.Chemical Abstract Service number	vPvB	Very Persistent and Very Bioaccumulative
CODChemical oxygen demand (COD)EC-No.European Community numberENEuropean StandardIOELVIndicative Occupational Exposure Limit ValueN.O.S.Not Otherwise SpecifiedOELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassCAS-No.Chemical Abstract Service number	BLV	Biological limit value
EC-No.European Community numberENEuropean StandardIOELVIndicative Occupational Exposure Limit ValueN.O.S.Not Otherwise SpecifiedOELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassCAS-No.Chemical Abstract Service number	BOD	Biochemical oxygen demand (BOD)
ENEuropean StandardIOELVIndicative Occupational Exposure Limit ValueN.O.S.Not Otherwise SpecifiedOELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassCAS-No.Chemical Abstract Service number	COD	Chemical oxygen demand (COD)
IOELVIndicative Occupational Exposure Limit ValueN.O.S.Not Otherwise SpecifiedOELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassCAS-No.Chemical Abstract Service number	EC-No.	European Community number
N.O.S.Not Otherwise SpecifiedOELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassCAS-No.Chemical Abstract Service number	EN	European Standard
OELOccupational Exposure LimitThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassCAS-No.Chemical Abstract Service number	IOELV	Indicative Occupational Exposure Limit Value
ThODTheoretical oxygen demand (ThOD)TRGSTechnical Rules for Hazardous SubstancesVOCVolatile Organic CompoundsWGKWater Hazard ClassCAS-No.Chemical Abstract Service number	N.O.S.	Not Otherwise Specified
TRGS       Technical Rules for Hazardous Substances         VOC       Volatile Organic Compounds         WGK       Water Hazard Class         CAS-No.       Chemical Abstract Service number	OEL	Occupational Exposure Limit
VOC     Volatile Organic Compounds       WGK     Water Hazard Class       CAS-No.     Chemical Abstract Service number	ThOD	Theoretical oxygen demand (ThOD)
WGK     Water Hazard Class       CAS-No.     Chemical Abstract Service number	TRGS	Technical Rules for Hazardous Substances
CAS-No. Chemical Abstract Service number	VOC	Volatile Organic Compounds
	WGK	Water Hazard Class
ED Endocrine disrupting properties	CAS-No.	Chemical Abstract Service number
	ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Met. Corr. 1	Corrosive to metals, Category 1
H290	May be corrosive to metals.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.