SAFETY DATA SHEET

FOLY FERRO

This safety data sheet complies with the requirements of: Regulation (EC) No. 453/2010 and Regulation (EC) No. 1272/2008



SDS #: Q35-IRON-A

Revision date: 2018-11-13

Format: EU Version 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier Product Identifier

Product Code(s) Q35-IRON-A

Product Name FOLY FERRO

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

Recommended Use: A soluble fertilizer for use in agriculture and horticulture

Restrictions on useUse as recommended by the label.

1.3. Details of the supplier of the safety data sheet

<u>Manufacturer</u> FMC Agro Limited

Rectors Lane
Pentre
Flintshire
CH5 2DH
United Kingdom
Tel: + 44 1244 537370
E-mail: fmc.agro.uk@fmc.com

For further information, please contact:

Contact point Tel: +44(0) 1244 537370

Email: fmc.agro.uk@fmc.com

1.4. Emergency telephone number

Emergency telephone Medical emergencies:

Austria: +43 1 406 43 43 Belgium: +32 70 245 245 Bulgaria: +359 2 9154 409

Cyprus: 1401

Czech Republic: +420 224 919 293, +420 224 915 402

Denmark: +45 82 12 12 12 France: +33 (0) 1 45 42 59 59 Finland: +358 9 471 977 Greece: 30 210 77 93 777 Hungary: +36 80 20 11 99

Ireland (Republic): +352 1 809 2166

Italy: +39 02 6610 1029

Lithuania: +370 523 62052, +370 687 53378

Luxembourg: +352 8002 5500 Netherlands: +31 30 274 88 88 Norway: +47 22 591300

Poland: +48 22 619 66 54, +48 22 619 08 97

Page 1/9

SDS #: Q35-IRON-A **Revision date**: 2018-11-13

Version 1

Portugal: 808 250 143 (in Portugal only), +351 21 330 3284

Romania: +40 21318 3606 Slovakia: +421 2 54 77 4 166 Slovenia: +386 41 650 500 Spain: +34 91 562 04 20 Sweden: +46 08-331231112

Switzerland: 145

United Kingdom: 0870 600 6266 (in the UK only)

U.S.A. & Canada: +1 800 / 331-3148

All other countries: +1 651 / 632-6793 (Collect)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

Hazard symbol not required. This product has no classification under CLP This product has no label elements.

2.2. Label elements

Hazard pictograms

Hazard symbol not required. This product has no classification under CLP This product has no label elements.

Signal Word

None

2.3. Other hazards

This product is not identified as a PBT/vPvB substance.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name	EC-No	CAS-No	Weight percent	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Acetic acid, oxo-, sodium salt, reaction products with ethylenediamine and phenol, Iron	283-044-5	84539-55-9	60-100	Not classified	No data available

Additional Information

For the full text of the H- and EUH- phrases mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

SDS #: Q35-IRON-A **Revision date: 2018-11-13**

Version 1

Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Call a doctor if **Eye Contact**

irritation persists.

Skin Contact Wash off immediately with soap and plenty of water. If symptoms persist, call a doctor.

Inhalation Remove person from exposure ensuring one's own safety while doing so. Consult a doctor

if necessary.

Rinse mouth with water and afterwards drink plenty of water or milk. Ingestion

4.2. Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed None known.

4.3. Indication of any immediate medical attention and special treatment needed

Indication of immediate medical attention and special treatment

needed, if necessary

Treat symptomatically.

Section 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire Dry chemical, Carbon dioxide (CO2).

Large Fire Water spray, Foam.

Unsuitable extinguishing media

None

5.2. Special hazards arising from the substance or mixture

Not flammable, Not easily combustible.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions

Avoid contact with the skin and the eyes. Avoid breathing dust. Stop leak if you can do it without risk. For personal protection see section 8.

For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Keep material out of lakes, streams, ponds, and sewer drains. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Take up mechanically and collect in suitable container for disposal. Transfer to a closable, Methods for cleaning up

SDS #: Q35-IRON-A **Revision date:** 2018-11-13

Version 1

labeled salvage container for disposal by an appropriate method. Refer to section 13 of SDS for suitable method of disposal. After cleaning, flush away traces with water.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Avoid dust formation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep out of reach of children and animals. Keep away from food, drink and animal feedingstuffs.

Packageing material Must only be kept in original packaging.

7.3. Specific end use(s)

Specific Use(s)

Agriculture: Fertiliser.

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Derived No Effect Level (DNEL) DNEL for workers:

0,8 mg/kg of body weight / day (skin exposition)

1,8 mg/m³ (inhalation)

DNEL for population in general:

0,417 mg/kg of body weight / day (skin exposition)

0,435 mg/m³ (inhalation)

0,125 mg/kg of body weight / day (oral exposition).

Predicted No Effect Concentration

(PNEC)

PNEC water (water): 2,40 mg/L

PNEC water (sea water): 0,24 mg/L

PNEC water (intermitent emissions): 1,20 mg/L

PNEC sediment (water): 1,90 mg/kg PNEC sediment (sea water): 0,19 mg/kg

PNEC soil: 1,60 mg/kg

PNEC residual water treatment plant: 45,00 mg/L.

PNEC oral: 1,1 mg/kg of food.

8.2. Exposure controls

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection Tightly fitting safety goggles. Provide emergency on-site eyewash.

SDS #: Q35-IRON-A **Revision date**: 2018-11-13

Version 1

Hand Protection Rubber gloves. Nitrile gloves. PVC gloves. Chemical resistant according to EN 374.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection In case of insufficient ventilation wear suitable respiratory equipment.

Environmental exposure controls Refer to specific Member State legislation for requirements under Community

environmental legislation.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical StateDry powderAppearancemicropowderOdourCharacteristicColourBlack, Red

Odour threshold No information available pH 7.5 - 9.5 (1% solution) Melting point/freezing point > 200 °C, Decomposes

Boiling point/boiling range Decomposes

Flash point No information available Evaporation Rate No information available

Flammability (solid, gas) Flammability Limit in Air

Upper flammability limit:
Lower flammability limit
Vapour pressure
Vapour density
Specific gravity
No information available
< 1E-6hPa @ 25°C
No information available
No information available

Water solubility Theoretical 120 g/L; Practical (CoA) 60 g/L

Solubility in other solvents
Partition coefficient
Autoignition temperature
Decomposition temperature
Viscosity, kinematic
Viscosity, dynamic

No information available
Log Kow: < -4,2 @ 23°C
331°C @ 1013.25 hPa
No information available
No information available
No information available

Explosive properties Not explosive Oxidising properties Non-oxidizing

9.2. Other information

Softening point
Molecular weight
VOC content (%)
Density
No information available
No information available
No information available
450 – 650 kg/m³

Bulk densityNo information available **K**_{st}
No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal use conditions

10.2. Chemical stability

Stable under recommended storage conditions.

Explosion data

Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

10.3. Possibility of hazardous reactions

SDS #: Q35-IRON-A **Revision date**: 2018-11-13

Version 1

Hazardous polymerisation

Hazardous polymerization does not occur.

Hazardous reactions

None under normal processing. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

Strong oxidising agents,

10.6. Hazardous decomposition products

May emit toxic fumes under fire conditions: Nitrogen oxides (NOx), Carbon oxides.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

LD50 Oral > 2000 mg/kg (rat) (Method: OECD 401)

LD50 Dermal > 2000 mg/kg (rat) OECD 402

Inhalation LC50 > 4200 mg/m³ (rat) (Method: OECD 403)

Skin corrosion/irritation
Serious eye damage/eye irritation
Sensitisation
Non-irritating (rabbit). (Method: OECD 404).
Non-irritating (rabbit). (Method: OECD 405).
Non-sensitizing (mice-LLNA) (Method OECD 429)

Mutagenicity Not mutagenic.

Carcinogenicity This product is not considered to be a carcinogen.

Reproductive toxicity No information available.

Teratogenicity Not teratogenic in animal studies.

STOT - single exposure
STOT - repeated exposure
No information available.
No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity The product is not toxic to fish, aquatic invertebrates, aquatic algae, and aquatic

microorganisms (OECD Guidelines 203, 202, 201, and 209, respectively).

12.2. Persistence and degradability

Product is biodegradable.

Page 6/9

SDS #: Q35-IRON-A **Revision date**: 2018-11-13

Version 1

12.3. Bioaccumulative potential

Does not bioaccumulate.

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

12.6. Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused

products

Transfer to a suitable container and arrange for collection by specialised disposal company. Do not contaminate ponds, waterways or ditches with chemical or used containers. Do not

discharge to sewer systems.

Contaminated Packaging Clean container with water. Empty containers should be taken to an approved waste

handling site for recycling or disposal. Dispose of rinse water in accordance with local and

national guidelines.

EWC Waste Disposal No 02 01 08

OTHER INFORMATION NOTE: The user's attention is drawn to the possible existence of specific European,

national or local regulations regarding disposal.

Section 14: TRANSPORT INFORMATION

NOTE NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT

REGULATIONS.

IMDG/IMO

14.1 UN/ID noNot regulated14.2 Proper Shipping NameNot regulated14.3 Hazard classNot regulated14.4 Packing GroupNot regulated14.5 Marine PollutantNot applicable

14.6 Special Provisions None

14.7 Transport in bulk according to This product is not transported in bulk containers.

Annex II of MARPOL and the IBC

Code

RID

14.1 UN/ID noNot regulated14.2 Proper Shipping NameNot regulated14.3 Hazard classNot regulated14.4 Packing GroupNot regulated14.5 Environmental HazardNot applicable

14.6 Special Provisions None

ADR/RID

SDS #: Q35-IRON-A **Revision date**: 2018-11-13

Version 1

14.1 UN/ID noNot regulated14.2 Proper Shipping NameNot regulated14.3 Hazard classNot regulated14.4 Packing GroupNot regulated14.5 Environmental HazardNot applicable14.6 Special ProvisionsNone

ICAO/IATA

14.1UN/ID noNot regulated14.2Proper Shipping NameNot regulated14.3Hazard classNot regulated14.4Packing GroupNot regulated14.5Environmental HazardNot applicable

14.6 Special Provisions None

Section 15: REGULATORY INFORMATION

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

European Union

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not Applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not Applicable

International Inventories

Chemical name	TSCA	DSL	EINECS/ELINC			KECL (Korea)		AICS
		(Canada)	S (Europe)	(Japan)	(IECSC)		(Philippines)	(Australia)
	States)							
Acetic acid, oxo-, sodium			X					
salt, reaction products with								
ethylenediamine and								
phenol, Iron								
84539-55-9								

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

<u>Legend</u>

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: CAS (Chemical Abstracts Service)

Ceiling: Maximum limit value:

DNEL: Derived No Effect Level (DNEL)

SDS #: Q35-IRON-A

Revision date: 2018-11-13

Version 1

EINECS: EINECS (European Inventory of Existing Chemical Substances)

GHS: Globally Harmonised System (GHS)

IATA: International Air Transport Association (IATA)
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods (IMDG)

LC50: LC50 (lethal concentration)

LD50: LD50 (lethal dose)

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

STEL: Short term exposure limit

SVHC: Substances of Very High Concern for Authorisation:

TWA: time weighted average

vPvB: very Persistent and very Bioaccumulative

Revision date: 2018-11-13

Reason for revision: Initial Release.

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Prepared By

FMC Corporation

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End of Safety Data Sheet