according to Regulation (EC) No. 1907/2006



BAYFERROX 345

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.02.2019 103000020537 Country / Language: GB / EN(GB)

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

1.1 Product identifier

Trade name : BAYFERROX 345

Product code : 58177725

REACH Registration Number : 01-2119457646-28-0000

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

Use of the Sub- : Colorants (pigments and dyestuffs), inorganic

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Supplier : LANXESS Deutschland GmbH

Production, Technology, Safety & Environment

51369 Leverkusen, Germany

Telephone : +4922188852288

E-mail address of person

responsible for the SDS

: infosds@lanxess.com

1.4 Emergency telephone number

0870 190 6777. National Chemical Emergency Centre

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

according to Regulation (EC) No. 1907/2006



BAYFERROX 345

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.02.2019 103000020537 Country / Language: GB / EN(GB)

Chemical nature : Fe3O4

Components

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Do not leave the victim unattended.

If inhaled : Move the victim to fresh air.

Get medical attention if symptoms occur.

If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained per-

sonnel.

If unconscious, place in recovery position and get medical

attention immediately.

Loosen tight clothing such as a collar, tie, belt or waistband.

In case of skin contact : No special measures required.

In case of eye contact : Immediately flush eyes with plenty of water, occasionally lifting

the upper and lower eyelids.

If easy to do, remove contact lens, if worn. Continue to rinse for at least 10 minutes. Get medical attention if symptoms appear.

If swallowed : No special measures required.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : See Section 11 for more detailed information on health effects

and symptoms.

Risks : See Section 11 for more detailed information on health effects

and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : See Section 11 for more detailed information on health effects

and symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam, dry chemical or

 CO_2 .

according to Regulation (EC) No. 1907/2006



BAYFERROX 345

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.02.2019 103000020537 Country / Language: GB / EN(GB)

Unsuitable extinguishing

media

None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

No information available.

Hazardous combustion prod: :

ucts

The product itself does not burn.

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full

face-piece operated in positive pressure mode.

Further information : Standard procedure for chemical fires.

Promptly isolate the scene by removing all persons from the

vicinity of the incident if there is a fire.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : No action shall be taken involving any personal risk or without

suitable training.

Keep unnecessary and unprotected personnel from entering.

Avoid breathing dust.

Use personal protective equipment.

Avoid dust formation.

6.2 Environmental precautions

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with

soil, waterways, drains and sewers.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and arrange disposal without creating dust.

Sweep up and shovel.

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

For disposal considerations see section 13.

according to Regulation (EC) No. 1907/2006

LANXESS Energizing Chemistry

BAYFERROX 345

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.02.2019 103000020537 Country / Language: GB / EN(GB)

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Advice on protection against :

fire and explosion

Provide appropriate exhaust ventilation at places where dust

is formed.

Hygiene measures : General industrial hygiene practice.

When using do not eat, drink or smoke. Wash face, hands and any exposed skin thoroughly after handling. Wash contami-

nated clothing before reusing.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep containers tightly closed in a dry, cool and well-ventilated place. Electrical installations / working materials must comply with the technological safety

standards.

Advice on common storage : No materials to be especially mentioned.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis		
triiron tetraoxide	1317-61-9	TWA (Fumes)	5 mg/m3 (Iron)	GB EH40		
Further information	The word 'fume' is often used to include gases and vapours. This is not the case for exposure limits where 'fume' should normally be applied to solid particles generated by chemical reactions or condensed from the gaseous state, usually after volatilisation from melted substances. The generation of fume is often accompanied by a chemical reaction such as oxidation or thermal					

according to Regulation (EC) No. 1907/2006



BAYFERROX 345

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.02.2019 103000020537 Country / Language: GB / EN(GB)

	breakdown.					
		STEL (Fumes)	10 mg/m3	GB EH40		
			(Iron)			
Further information	The word 'fume' is often used to include gases and vapours. This is not the case for exposure limits where 'fume' should normally be applied to solid particles generated by chemical reactions or condensed from the gaseous state, usually after volatilisation from melted substances. The generation of fume is often accompanied by a chemical reaction such as oxidation or thermal breakdown.					

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef-	Value
			fects	
triiron tetraoxide	Workers	Inhalation	Systemic effects,	10 mg/m3
			Long-term exposure	
	Workers	Inhalation	Local effects, Long-	10 mg/m3
			term exposure	

8.2 Exposure controls

Engineering measures

This information is not available.

Personal protective equipment

Eye protection : Safety glasses

Safety glasses with side-shields

Hand protection

Wearing time : < 60 min

Material : Leather gloves

Skin and body protection : Choose body protection in relation to its type, to the concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

Additional body garments should be used (e.g. sleevelets, apron, disposable suit etc.), based on the task being per-

formed.

Respiratory protection : Dust-protection mask if there is a risk of dust formation.

Filter type : P1 filter

Environmental exposure controls

Water : The product should not be allowed to enter drains, water

courses or the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : powder

according to Regulation (EC) No. 1907/2006



BAYFERROX 345

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.02.2019 103000020537 Country / Language: GB / EN(GB)

Colour : black

Odour : odourless

Odour Threshold : No data available

pH : 4-8

Concentration: 5 %

Melting point/range : 1,597 °C

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : 4.6 g/cm³ (20 °C)

Bulk density : 800 - 1,200 kg/m³

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-

octanol/water

: No data available

Ignition temperature : No data available

Decomposition temperature : No data available

Viscosity : No data available

Explosive properties : No data available

Oxidizing properties : No data available

9.2 Other information

No data available

according to Regulation (EC) No. 1907/2006



BAYFERROX 345

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.02.2019 103000020537 Country / Language: GB / EN(GB)

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Under normal conditions of storage and use, hazardous reac-

tions will not occur.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No specific data.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

Hazardous decomposition : No decomposition if stored and applied as directed.

products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of : Inhalation exposure Eye contact

Skin contact

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

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

according to Regulation (EC) No. 1907/2006

LANXESS Energizing Chemistry

BAYFERROX 345

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.02.2019 103000020537 Country / Language: GB / EN(GB)

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 toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher...

12.6 Other adverse effects

Product:

Additional ecological infor-

Ecotoxicological data are not available.

mation No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Examine possibilities for re-utilisation.

Product residues and uncleaned empty containers should be packaged, sealed, labelled, and disposed of or recycled ac-

according to Regulation (EC) No. 1907/2006



BAYFERROX 345

Version Revision Date: SDS Number: Date of last issue: -

1.0 01.02.2019 103000020537 Country / Language: GB / EN(GB)

cording to relevant national and local regulations.

When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be

caused by residues.

For disposal within the EC, the appropriate code according to

the European Waste List (EWL) should be used.

It is among the tasks of the polluter to assign the waste to waste codes specific to industrial sectors and processes ac-

cording to the European Waste List (EWL).

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive

2008/98/EC

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Hazard statements : Not dangerous cargo.

Keep separated from foodstuffs.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

International Chemical Weapons Convention (CWC)

Not applicable

Schedules of Toxic Chemicals and Precursors

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

: Not applicable

according to Regulation (EC) No. 1907/2006



BAYFERROX 345

Version SDS Number: Date of last issue: -Revision Date:

103000020537 1.0 01.02.2019 Country / Language: GB / EN(GB)

REACH - List of substances subject to authorisation Not applicable

(Annex XIV)

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Not applicable

Neither banned nor restricted

Regulation (EC) No 850/2004 on persistent organic pol-

lutants

Council Regulation (EC) No 111/2005 laying down rules : for the monitoring of trade between the Community and

third countries in drug precursors.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

Full text of other abbreviations

GB EH40 UK. EH40 WEL - Workplace Exposure Limits

GB EH40 / TWA Long-term exposure limit (8-hour TWA reference period) GB EH40 / STEL Short-term exposure limit (15-minute reference period)

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

Further information

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet and its Annex [if required according to Regulation (EC) 1907/2006 (REACh)] is to describe the products in terms of their safety requirements. The given details do not imply any guarantee concerning the composition, properties or performance.