Safety data sheet	Page 1/6	
Safety data sheet according to 1907/2006/EC, Article 31		
Printing date 17.07.2021	Revision: 17.07.2021	
SECTION 1: Identification of the substance/mixture and of the	e company/undertaking	
· 1.1 Product identifier		
· Trade name: Butyrylferrocene, 99%		
<ul> <li>Item number: 26-0725</li> <li>CAS Number: 1271-94-9</li> <li>EC number: 215-045-3</li> <li>1.2 Relevant identified uses of the substance or mixture and uses advised ag No further relevant information available.</li> </ul>	gainst	
<ul> <li>1.3 Details of the supplier of the safety data sheet</li> <li>Manufacturer/Supplier: Strem Chemicals, Inc.</li> <li>7 Mulliken Way NEWBURYPORT, MA 01950 USA info@strem.com</li> </ul>		
<ul> <li>Further information obtainable from: Technical Department</li> <li>1.4 Emergency telephone number: EMERGENCY: CHEMTREC: + 1 (800) 424-9300 During normal opening times: +1 (978) 499-1600</li> </ul>		
SECTION 2: Hazards identification		
<ul> <li>• 2.1 Classification of the substance or mixture</li> <li>• Classification according to Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation.</li> </ul>		
<ul> <li>• 2.2 Label elements</li> <li>• Labelling according to Regulation (EC) No 1272/2008 Void</li> <li>• Hazard nictograms Void</li> </ul>		

- Hazard pictograms Void
- · Signal word Void

CHEMICALS, IN

- Hazard statements Void
- Precautionary statements
- P262Do not get in eyes, on skin, or on clothing.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- *P304+P340* IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P403+P233Store in a well-ventilated place. Keep container tightly closed.
- *P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*
- $\cdot$  2.3 Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

# SECTION 3: Composition/information on ingredients

- · 3.1 Chemical characterisation: Substances
- · CAS No. Description

1271-94-9 Butyroferrocene, 99%

(Contd. on page 2)

Printing date 17.07.2021

Revision: 17.07.2021

(Contd. of page 1)

Trade name: Butyrylferrocene, 99%

· Identification number(s)

• EC number: 215-045-3

# **SECTION 4: First aid measures**

• 4.1 Description of first aid measures

- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

# **SECTION 5: Firefighting measures**

· 5.1 Extinguishing media

- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

## **SECTION 6:** Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- · 6.2 Environmental precautions: No special measures required.
- 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to item 13.
- 6.4 Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## **SECTION 7: Handling and storage**

- · 7.1 Precautions for safe handling No special measures required.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- 7.3 Specific end use(s) No further relevant information available.

(Contd. on page 3)

Printing date 17.07.2021

Revision: 17.07.2021

Trade name: Butyrylferrocene, 99%

(Contd. of page 2)

	f technical facilities: No further data; see item 7.
8.1 Control parameters Ingredients with limit values that requi Additional information: The lists valid	i <b>re monitoring at the workplace:</b> Not required. during the making were used as basis.
8.2 Exposure controls Personal protective equipment: General protective and hygienic measu The usual precautionary measures are t Respiratory protection: Not required. Protection of hands:	tres: to be adhered to when handling chemicals.
Protective gloves	
Due to missing tests no recommendation chemical mixture. Selection of the glove material on conside <b>Material of gloves</b> The selection of the suitable gloves does varies from manufacturer to manufacture <b>Penetration time of glove material</b>	pe found out by the manufacturer of the protective gloves and has to be
Lyc protection. Obggies recommended	
9.1 Information on basic physical and	
9.1 Information on basic physical and General Information	
9.1 Information on basic physical and General Information Appearance: Form:	chemical properties Liquid
9.1 Information on basic physical and General Information Appearance: Form: Colour:	chemical properties Liquid Dark orange colour
9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour:	chemical properties Liquid Dark orange colour Odourless
<ul> <li>9.1 Information on basic physical and General Information</li> <li>Appearance: Form: Colour:</li> <li>Odour:</li> <li>Odour threshold:</li> </ul>	chemical properties Liquid Dark orange colour Odourless Not determined.
9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value:	chemical properties Liquid Dark orange colour Odourless
<ul> <li>9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour:</li> <li>Odour:</li> <li>Odour threshold:</li> <li>pH-value:</li> <li>Change in condition</li> </ul>	chemical properties Liquid Dark orange colour Odourless Not determined. Not determined.
<ul> <li>9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour:</li> <li>Odour:</li> <li>Odour threshold:</li> <li>pH-value:</li> <li>Change in condition Melting point/freezing point:</li> </ul>	chemical properties Liquid Dark orange colour Odourless Not determined. Not determined. Undetermined.
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<ul> <li>9.1 Information on basic physical and General Information</li> <li>Appearance: Form: Colour:</li> <li>Odour:</li> <li>Odour threshold:</li> <li>pH-value:</li> <li>Change in condition Melting point/freezing point: Initial boiling point and boiling rang</li> <li>Flash point:</li> <li>Flammability (solid, gas):</li> <li>Ignition temperature:</li> <li>Decomposition temperature:</li> </ul>	chemical properties Liquid Dark orange colour Odourless Not determined. Not determined. Undetermined. e: Undetermined. Not applicable. Not determined. Not determined.
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<ul> <li>9.1 Information on basic physical and General Information</li> <li>Appearance: Form: Colour: Odour:</li> <li>Odour threshold:</li> <li>pH-value:</li> <li>Change in condition Melting point/freezing point: Initial boiling point and boiling rang</li> <li>Flash point:</li> <li>Flammability (solid, gas):</li> <li>Ignition temperature:</li> <li>Decomposition temperature:</li> <li>Auto-ignition temperature:</li> <li>Explosive properties:</li> </ul>	chemical properties Liquid Dark orange colour Odourless Not determined. Not determined. Undetermined. e: Undetermined. Not applicable. Not determined. Not determined.
<ul> <li>9.1 Information on basic physical and General Information</li> <li>Appearance: Form: Colour: Odour:</li> <li>Odour threshold:</li> <li>pH-value:</li> <li>Change in condition Melting point/freezing point: Initial boiling point and boiling rang</li> <li>Flash point:</li> <li>Flammability (solid, gas):</li> <li>Ignition temperature:</li> <li>Decomposition temperature:</li> <li>Auto-ignition temperature:</li> <li>Explosive properties:</li> <li>Explosion limits:</li> </ul>	chemical properties Liquid Dark orange colour Odourless Not determined. Not determined. Undetermined. e: Undetermined. Not applicable. Not determined. Not determined. Not determined. Product does not present an explosion hazard.
<ul> <li>9.1 Information on basic physical and General Information</li> <li>Appearance: Form: Colour: Odour:</li> <li>Odour threshold:</li> <li>pH-value:</li> <li>Change in condition Melting point/freezing point: Initial boiling point and boiling rang</li> <li>Flash point:</li> <li>Flammability (solid, gas):</li> <li>Ignition temperature:</li> <li>Decomposition temperature:</li> <li>Auto-ignition temperature:</li> <li>Explosive properties:</li> </ul>	chemical properties Liquid Dark orange colour Odourless Not determined. Not determined. Undetermined. e: Undetermined. Not applicable. Not determined. Not determined. Not determined.



Printing date 17.07.2021

Revision: 17.07.2021

Trade name: Butyrylferrocene, 99%

	(Contd. of page
· Vapour pressure:	Not determined.
· Density at 20 °C:	1.254 g/cm <sup>3</sup>
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
VÕC (EC)	0.00 %
· 9.2 Other information	No further relevant information available.

## **SECTION 10: Stability and reactivity**

· 10.1 Reactivity No further relevant information available.

- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

## **SECTION 11: Toxicological information**

· 11.1 Information on toxicological effects

- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

## **SECTION 12: Ecological information**

· 12.1 Toxicity

· 12.2 Persistence and degradability No further relevant information available.

(Contd. on page 5)

<sup>•</sup> Aquatic toxicity: No further relevant information available.

<sup>-</sup> GB

Printing date 17.07.2021

CHEMICALS.

Revision: 17.07.2021

(Contd. of page 4)

#### Trade name: Butyrylferrocene, 99%

- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Not known to be hazardous to water.
- · 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- $\cdot$  12.6 Other adverse effects No further relevant information available.

## **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation Disposal must be made according to official regulations.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

## **SECTION 14: Transport information**

· 14.1 UN-Number			
· ADR, ADN, IMDG, IATA	not regulated		
· 14.2 UN proper shipping name			
· ADR, ADN, IMDG, IATA	not regulated		
· 14.3 Transport hazard class(es)			
· ADR, ADN, IMDG, IATA			
· Class	not regulated		
· 14.4 Packing group			
· ADR, IMDĞ, IATA	not regulated		
· 14.5 Environmental hazards:			
· Marine pollutant:	No		
· 14.6 Special precautions for user	Not applicable.		
· 14.7 Transport in bulk according to Annex	• 14.7 Transport in bulk according to Annex II of		
Marpol and the IBC Code	Not applicable.		
· UN "Model Regulation":	not regulated		

## **SECTION 15: Regulatory information**

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I Substance is not listed.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

(Contd. on page 6)

Printing date 17.07.2021

Revision: 17.07.2021

#### Trade name: Butyrylferrocene, 99%

(Contd. of page 5)

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### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Technical Department.

· Contact: Technical Director

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

