

Revision Date 23-Mar-2012

Revision Number 3

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description:

Diiron nonacarbonyl

Cat No.

209280000; 209280100; 209280500

Synonyms

None.

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

Recommended Use

Laboratory chemicals

Uses advised against

No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300

CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Pyrophoric solids.

Category 1

Classification according to EU Directives 67/548/EEC or 1999/45/EC

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

Symbol(s)

F - Highly flammable

R-phrases(s)

R17 - Spontaneously flammable in air

Label Elements

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SECTION 2. HAZARDS IDENTIFICATION



Signal Word

Danger

Hazard Statements

H250 - Catches fire spontaneously if exposed to air

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P222 - Do not allow contact with air

P243 - Take precautionary measures against static discharge

P422 - Store contents under inert gas

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.
Iron, tri-mu.-carbonylhexacarbonyldi- (Fe-Fe) 15321-51-4	EEC No. 239-359-5	98	15321-51-4	F; R17	Pyr. Sol. 1 (H250)	-

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

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

Ingestion

Clean mouth with water. Get medical attention.

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Inhalation Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

Notes to Physician Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Pyrophoric: Spontaneously flammable in air.

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Handle under inert gas, protect from moisture.

Conditions for safe storage, including any incompatibilities

Keep in a dry place. Keep container tightly closed. Keep away from direct sunlight. Store under an inert atmosphere. Refrigerator/flammables.

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Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Component

Iron, tri-.mu.-carbonylhexacarbonyldi-, (Fe-Fe)

European Union	The United Kingdom	France	Belgium	Spain
				VLA-ED: 1 mg/m ³ 8 horas

Component

Iron, tri-.mu.-carbonylhexacarbonyldi-, (Fe-Fe)

Italy	Germany	Portugal	The Netherlands	Finland
		TWA: 1 mg/m ³ 8 horas		

Component

Iron, tri-.mu.-carbonylhexacarbonyldi-, (Fe-Fe)

Austria	Denmark	Switzerland	Poland	Norway
		MAK: 1 mg/m ³ 8 Stunden		

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls

Engineering Measures

Use explosion-proof electrical/ventilating/lighting/equipment

Personal protective equipment

Eye Protection

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Solid

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow-orange
odor	odorless
pH	No information available.
Boiling Point/Range	No information available.
Melting Point/Range	100°C / 212°F
Flash Point	No information available.
Autoignition Temperature	No information available.
Water Solubility	Insoluble
Molecular Formula	C ₉ Fe ₂ O ₉
Molecular Weight	363.78

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable under normal conditions. Light sensitive. Air sensitive.

Possibility of Hazardous Reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	No information available.

Conditions to Avoid

To avoid thermal decomposition, do not overheat, Excess heat, Exposure to air, Exposure to light, Incompatible products.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product Information	No acute toxicity information is available for this product
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Component Information

Chronic Toxicity

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SECTION 11. TOXICOLOGICAL INFORMATION

Carcinogenicity	There are no known carcinogenic chemicals in this product
Sensitization	No information available.
Mutagenic Effects	No information available
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organs	No information available.
Other Adverse Effects	The toxicological properties have not been fully investigated.
Endocrine Disruptor Information	None known

SECTION 12. ECOLOGICAL INFORMATION**Toxicity**

Ecotoxicity effects	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants
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Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment**Other adverse effects**

No information available

SECTION 13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Waste from Residues / Unused Products	Dispose of in accordance with local regulations
Contaminated Packaging	Empty containers should be taken to local recyclers for disposal

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SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

UN-No 2846
Hazard Class 4.2
Packing Group I
Proper Shipping Name PYROPHORIC SOLID, ORGANIC, N.O.S.

ADR

UN-No 2846
Hazard Class 4.2
Packing Group I
Proper Shipping Name PYROPHORIC SOLID, ORGANIC, N.O.S.

IATA

UN-No 2846
Hazard Class 4.2
Packing Group I
Proper Shipping Name PYROPHORIC SOLID, ORGANIC, N.O.S.* , FORBIDDEN FOR IATA TRANSPORT

SECTION 15. REGULATORY INFORMATION

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

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Iron, tri-.mu.-carbonylhexacarbonyldi-, (Fe-Fe)	239-359-5	-		X	-	X	X	-	X	-	-

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Diiron nonacarbonyl**Revision Date** 23-Mar-2012**Chemical Safety Assessment****SECTION 16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R11 - Highly flammable

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Revision Summary

(M)SDS sections updated, 14.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet