

SAFETY DATA SHEET

Creation Date 12-Sep-2014 Revision Date 24-Dec-2021 Revision Number 5

1. Identification

Product Name Acetylferrocene

Cat No.: AC147990000; AC147990050; AC147990250; AC147991000

CAS No 1271-55-2 Synonyms Acetoferrocene.

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number

For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11

Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99

CHEMTREC Tel. No.US:001-800-424-9300 / Europe:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity Category 2
Acute dermal toxicity Category 3

Label Elements

Signal Word

Danger

Hazard Statements

Fatal if swallowed Toxic in contact with skin



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Skin

IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor/physician if you feel unwell

Remove/Take off immediately all contaminated clothing

Wash contaminated clothing before reuse

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS No	Weight %	
Ferrocene, acetyl-	1271-55-2	95	

4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth

method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and

effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

No information available

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

Upper No data available
Lower No data available

Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO2). Heavy metal oxides.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

HealthFlammabilityInstabilityPhysical hazards410N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust

formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe

areas.

Environmental Precautions Should not be released into the environment. Do not allow material to contaminate ground

water system. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. **Up**

	7. Handling and storage				
Handling Wear personal protective equipment/face protection. Do not get in eyes, on					
_	clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust,				
	vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.				

Storage. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible

Materials. Strong acids. Strong bases. Reducing Agent.

8. Exposure controls / personal protection

Exposure Guidelines

	Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Γ	Ferrocene, acetyl-	TWA: 1 mg/m ³	(Vacated) TWA: 1 mg/m ³	TWA: 1 mg/m ³	TWA: 1 mg/m ³

<u>Legend</u>

ACGIH - American Conference of Governmental Industrial Hygienists OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

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Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

Wear appropriate protective eyeglasses or chemical safety goggles as described by **Eye/face Protection**

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

FN166.

Wear appropriate protective gloves and clothing to prevent skin exposure. Skin and body protection

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.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures**

9. Physical and chemical properties

Physical State Powder Solid **Appearance** Orange

Odor No information available **Odor Threshold** No information available

рΗ No information available

Melting Point/Range 81 - 86 °C / 177.8 - 186.8 °F

Boiling Point/Range 160 - 163 °C / 320 - 325.4 °F @ 4 hPa

Flash Point No information available **Evaporation Rate** Not applicable

Flammability (solid, gas) No information available

Flammability or explosive limits

Upper No data available Lower No data available **Vapor Pressure** No information available

Vapor Density Not applicable

Specific Gravity No information available Solubility Insoluble in water Partition coefficient; n-octanol/water No data available **Autoignition Temperature** No information available

Decomposition Temperature No information available

Viscosity Not applicable Molecular Formula C12 H12 Fe O 228.07 **Molecular Weight**

10. Stability and reactivity

None known, based on information available **Reactive Hazard**

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong acids, Strong bases, Reducing Agent

Hazardous Decomposition Products Carbon monoxide (CO₂), Carbon dioxide (CO₂), Heavy metal oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

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Acute Toxicity

Product Information

Component Information

Component LD50 Oral		LD50 Dermal	LC50 Inhalation
Ferrocene, acetyl-	LD50 = 25 mg/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic

Products

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Ferrocene, acetyl-	1271-55-2	Not listed				

Mutagenic Effects

No information available

No information available. **Reproductive Effects**

No information available. **Developmental Effects**

Teratogenicity No information available.

STOT - single exposure None known STOT - repeated exposure None known

No information available **Aspiration hazard**

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability Insoluble in water May persist based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Is not likely mobile in the environment due its low water solubility.

13. Disposal considerations

Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods**

> hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN3467 **UN-No**

Proper Shipping Name ORGANOMETALLIC COMPOUND, SOLID, TOXIC, N.O.S.

Technical Name Ferrocene, acetyl-

Hazard Class 6.1
Packing Group

TDG

UN-No UN3467

Proper Shipping Name ORGANOMETALLIC COMPOUND, SOLID, TOXIC, N.O.S.

Hazard Class 6.1 Packing Group II

<u>IATA</u>

UN-No UN3467

Proper Shipping Name ORGANOMETALLIC COMPOUND, SOLID, TOXIC, N.O.S.

Hazard Class 6.
Packing Group

IMDG/IMO

UN-No UN3467

Proper Shipping Name ORGANOMETALLIC COMPOUND, SOLID, TOXIC, N.O.S.

Hazard Class 6.1 Packing Group

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags	
Ferrocene, acetyl-	1271-55-2	X	ACTIVE	-	

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

- - NOLLISIEG

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Ferrocene, acetyl-	1271-55-2	-	Х	215-043-2	Х	-		-	-	-

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Not applicable

Health Administration

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ferrocene, acetyl-	=	=	X	=	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Ferrocene, acetyl-

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Ferrocene, acetyl-	1271-55-2	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive	Seveso III Directive	Rotterdam	Basel Convention
		(2012/18/EC) -	(2012/18/EC) -	Convention (PIC)	(Hazardous Waste)
		Qualifying Quantities	Qualifying Quantities		
		for Major Accident	for Safety Report		

16. Other information

Prepared By Regulatory Affairs

1271-55-2

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Not applicable

 Creation Date
 12-Sep-2014

 Revision Date
 24-Dec-2021

 Print Date
 24-Dec-2021

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Not applicable

Not applicable

Not applicable

Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of SDS