Material Safety Data Sheet acc. to OSHA and ANSI

Printing date 05/01/2009

Reviewed on 03/01/2007

1 Identification of substance:

Product details:

Product name: Iron wire Stock number: 14246 Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company Johnson Matthey Catalog Company, Inc.

30 Bond Street

Ward Hill, MA 01835-8099 Emergency Phone: (978) 521-6300 CHEMTREC: (800) 424-9300 Web Site: www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency information:

During normal hours the Health, Safety and Environmental Department. After normal hours call Chemtrec at (800) 424-9300.

2 Composition/Data on components:

Chemical characterization:

Description: (CAS#) Iron (CAS# 7439-89-6), 100%

Identification number(s): EINECS Number: 231-096-4

3 Hazards identification

Hazard description: Not applicable

Information pertaining to particular dangers for man and environment Not applicable

Classification system HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH 0 **FIRE** 0 REACTIVITY 0

Health (acute effects) = 0 Flammability = 0Reactivity = 0

GHS label elements Void

4 First aid measures

General information No special measures required.

After inhalation Seek medical treatment in case of complaints.

After skin contact Generally the product does not irritate the skin.

After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing Seek medical treatment.

5 Fire fighting measures

Suitable extinguishing agents

Product is not flammable. Use fire fighting measures that suit the surrounding fire. Protective equipment: No special measures required.

6 Accidental release measures

Person-related safety precautions: Not required.

Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting: Pick up mechanically.

Additional information:

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling

Information for safe handling:

Handle under dry argon.

(Contd. on page 2)

(Contd. of page 1)

Material Safety Data Sheet acc. to OSHA and ANSI

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Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

No special precautions are necessary if used correctly.

Information about protection against explosions and fires: No special measures required.

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

Store away from water/moisture.

Store away from air.

Further information about storage conditions: Store under dry inert gas.

8 Exposure controls and personal protection

Additional information about design of technical systems: No further data; see item 7.

Components with limit values that require monitoring at the workplace: Not required.

Additional information: No data

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not required. Protection of hands: Not required. Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information	
Form: Color:	Wire
Odor:	Grey Odorless
Change in condition	
Melting point/Melting range:	1536°C (2797°F)
Boiling point/Boiling range:	3000°C (5432°F)
Sublimation temperature / start:	Not determined
Flash point:	Not applicable
Flammability (solid, gaseous)	Product is not flammable.
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapor pressure at 1787°C (3249°F):	1.33 hPa (1 mm Hg)
Density at 20°C (68°F):	7.87 g/cm³
Solubility in / Miscibility with	
Water:	Insoluble

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Materials to be avoided:

Water/moisture

Air

Oxidizing agents

Acids

Halogens

 $\textbf{\textit{Dangerous reactions}} \ \textit{No dangerous reactions} \ \textit{known}$

Dangerous products of decomposition: Metal oxide fume

USA

Material Safety Data Sheet acc. to OSHA and ANSI

Printing date 05/01/2009 Reviewed on 03/01/2007

Product name: Iron wire

(Contd. of page 2)

11 Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral LD50 20000 mg/kg (guinea pig)
30000 mg/kg (rat)

LDLo 20 mg/kg (rabbit)

Primary irritant effect:

on the skin: Powder: irritant effect on the eye: Powder: irritant effect

Sensitization: No sensitizing effects known.

Other information (about experimental toxicology):

Tumorigenic effects have been observed on tests with laboratory animals.

Subacute to chronic toxicity:

Iron compounds may cause vomiting, diarrhea, pink urine, black stool, and liver damage. May cause damage to the kidneys. Irritating to the respiratory tract, they may cause pulmonary fibrosis if dusts are inhaled.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known

The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for components in this product.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

General notes:

Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 Transport information

Not a hazardous material for transportation.

DOT regulations:

Hazard class: None

Land transport ADR/RID (cross-border)

ADR/RID class: None

Maritime transport IMDG:
IMDG Class: None

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

Transport/Additional information: Not dangerous according to the above specifications.

15 Regulations

Product related hazard informations:

Observe the general safety regulations when handling chemicals

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

Information about limitation of use: For use only by technically qualified individuals.

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the

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Reviewed on 03/01/2007 Printing date 05/01/2009

Product name: Iron wire

user.

(Contd. of page 3)

Department issuing MSDS: Health, Safety and Environmental Department.

Contact: Zachariah Holt Abbreviations and acronyms:

ADDR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
DOT: UR Department of Transport of T

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: Department of Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized 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)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

USA