Printing date 21.10.2014 Revision: 22.11.2014

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

· 1.1 Trade name: Electrolytic Iron Powder/Reduced Iron Powder

· CAS Number:

7439-89-6

· EC number:

231-096-4

- · Registration number: Pre-Registration number: 05-2118586044-40-0000
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture

Electrolytic iron powder used as a flour fortification, magnetic additive in paint, diamond cutting tools, magnetic alloy, Chemical reagent.

It is also use in various metallurgical applications, for surface coating, laboratory chemicals and manufacture of substances.

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Industrial Metal Powders (I) Pvt.Ltd

Gat No-699/1, Koregaon Bhima, Behind Kalyani Forge

Tal-Shirur, Dist.-Pune 412216. Maharashtra, INDIA.

· Further information obtainable from:

Tel: 00-91-2137-667900,252617

Fax – *00-91-2137-667900*

E-Mail: indpow@vsnl.com marketing@imp-india.com

· 1.4 Emergency telephone number:

Emergency telephone number: Kindly provide if available at your end.

Telephone number of EU importer:

Opening hours:

Other comments (e.g. language(s) of the phone service): English

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The substance is not classified according to the CLP regulation.

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- · Information concerning particular hazards for human and environment: Not applicable.
- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · 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 characterization: Substances
- · CAS No. Description

7439-89-6 Electrolytic iron powder/Reduced Iron Powder

- · Identification number(s)
- **EC number:** 231-096-4

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Trade name: Electrolytic Iron Powder/Reduced Iron Powder

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· Additional information: Molecular weight: 55.847 Molecular formula :Fe

Purity: > 99.5%

· SVHC The substance is not in the list of SVHC substances

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation:

Remove from exposure and move to fresh air immediately. If breathing has stopped, perform artificial respiration. Get medical attention.

- · After skin contact: Wash off with soap and plenty of water.
- · After eye contact:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

· After swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Information for doctor: Treat symptomatically.
- 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:

Dry chemical, dry sand, graphite, dolomite or sodium chloride. Do NOT use water.

- 5.2 Special hazards arising from the substance or mixture: Moderate hazard as fine powder when exposed to open flame.
- 5.3 Advice for firefighters Wear full bunker gear including a positive pressure self-contained breathing apparatus.
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use proper personal protective equipment as per the requirement.

Avoid dust formation. Avoid breathing vapors, mist or gas.

Ventilate the area thoroughly.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Sweep up and shovel. Keep in suitable, closed containers for disposal.

· 6.4 Reference to other sections

No dangerous substances are released.

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 Provide appropriate exhaust ventilation at places where dust is formed.
- · Information about fire and explosion protection: No special measures required.

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Safety data sheet COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006

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Trade name: Electrolytic Iron Powder/Reduced Iron Powder

• 7.2 Conditions for safe storage, including any incompatibilities

Keep away from oxidizing agents and reducing agents and acids. Keep away from ignition sources

· Storage:

· Requirements to be met by storerooms and receptacles:

Keep container tightly closed. Keep container in a cool, well-ventilated area.

· Information about storage in one common storage facility:

Store away from incompatible materials.

Store away from oxidizing agents.

Avoid dust generation..

· Further information about storage conditions:

Store powder in a dry area, -18 to 38 C.

Keep container tightly sealed.

· 7.3 Specific end use(s)

Electrolytic Iron Powder/Reduced Iron Powder used as a flour fortification, magnetic additive in paint, diamond cutting tools, magnetic alloy, Chemical

reagent.It is also use in various metallurgical applications, for surface coating, laboratory chemicals and manufacture of substances.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:

Wear protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Eye protection: Safety glasses or goggles
- · Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

Appearance: Solid
• Form: Powder

· Colour: Grey to grayish black

· Odorless

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· Change in condition

Melting point/Melting range: 1535 °C Boiling point/Boiling range: 3000 °C

· Flammability (solid, gaseous): Product is not flammable.

• Self-igniting: >700 degrees C

· Danger of explosion: Product does not present an explosion hazard.

· Vapour pressure at 1787 °C: 1 mmHg

· Density:

Relative density at 20 °C 0.5- 3.0 g/cm^3

· Solubility in / Miscibility with

water: Not soluble

• 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability Stable under recommended storage conditions.
- · Thermal decomposition / conditions to be avoided: Keep away from excess heat
- · 10.3 Possibility of hazardous reactions

Reactive with oxidizing agents and reducing agents. Low reactivity with acids.

- · 10.4 Conditions to avoid Mixtures of fine dust with air. Contact with an ignition source.
- $\cdot \textbf{10.5 Incompatible materials:} \textit{ Strong oxidizing agents, Strong acids.}$
- · 10.6 Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition will not occur.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- $\cdot \textit{LD/LC50} \ \textit{values relevant for classification:}$

Oral LD50 | 7500 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- $\cdot \textit{Additional toxicological information:}$

Iron is an essential nutrient. Iron compounds as a class are not associated with any particular industrial risk, although of iron oxide fumes or dust may cause a benign pneumoconiosis (siderosis). Dose levels of iron among iron workers developing siderosis have been reported to exceed 10 mg iron/m3. No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the International Agency for Research on Cancer (IARC).

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

- · Sensitization No sensitization effect.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

The substance is not carcinogenic, non-mutagenic and non toxic for reproduction.

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Trade name: Electrolytic Iron Powder/Reduced Iron Powder

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SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

96hr (static) 136 mg/l (Morone saxatilis)

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Generally not hazardous for water
- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Dispose off according to Federal, State and Local Regulations.

14.1 UN-Number ADR, ADN, IMDG, IATA	not applicable	
· · · · · · · · · · · · · · · · · · ·	noi applicable	
14.2 UN proper shipping name ADN, IMDG, IATA	not applicable	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA		
Class	not applicable	
14.4 Packing group		
ADR, IMDG, IATA	not applicable	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to Anne	ex II of	
MARPOL73/78 and the IBC Code	Not applicable.	
UN ''Model Regulation'':	-	

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SECTION 15: Regulatory information

· 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out and will be applicable at the time of REACH Registration.

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 MSDS: Product safety department.
- · Contact:

Mr. Prakash Dhoka, Director

E-Mail: indpow@vsnl.com marketing@imp-india.com

· 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 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· Sources

- * REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/ EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- * http://esis.jrc.ec.europa.eu/doc/IUCLID/datasheet/7439896.pdf
- * Registered Dossier(CAS: 7439-89-6)

 $http://apps.echa.europa.eu/registered/data/dossiers/DISS-9ea2736e-faca-51db-e044-00144f67d031/DISS-9ea2736e-faca-51db-e044-00144f67d031_DISS-9ea2736e-faca-51db-e044-00144f67d031.html$

* Sigma Aldrich MSDS

http://www.sigmaaldrich.com/MSDS/MSDS/DisplayMSDSPage.do?country=IN&language=en&productNumber=12310&brand=ALDRICH&PageToGoToURL=http%3A%2F%2Fwww.sigmaaldrich.com%2Fcatalog%2Fsearch%3Finterface%3DCAS%2520No.%26term%3D7439-89-

6%26N%3D0%2B%26mode%3Dpartialmax%26focus%3Dproduct%26lang%3Den%26region%3DIN*

*Industrial Metal Powders(I) Pvt.Ltd

http://imp-india.com/electrolytic-iron-powder/

- *Industrial Metal Powders(I) Pvt.Ltd Company SDS
- * Data compared to the previous version altered.
- Section 1: Chemical Product and Company Identification
- Section 2: Hazards Identification.
- Section 3: Composition and Information on Ingredients
- Section 4: First Aid Measures
- Section 5: Fire and Explosion Data
- Section 6: Accidental Release Measures
- Section 7: Handling and Storage
- Section 8: Exposure Controls/Personal Protection
- Section 9: Physical and Chemical Properties
- Section 13: Disposal Consideration.
- Section 16: Other Information

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