

# Material Safety Data Sheet



Completed 09-02-2026  
Revision: (date) -  
SDS version 1.0

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

### 1.1. Product Identifier

Trade Name: Ironchips and - powder  
Product- no.: -  
CAS-no.: 7439-89-6

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### **Recommended uses:**

Test dust

#### **Uses advised against:**

This product must not be used for purposes other than those recommended without first seeking the advice of the supplier.

### 1.3. Details of the supplier of the safety data sheet

#### **Company and address:**

Fiatec GmbH  
Burgkunstadter Str. 3, Mainleus  
DE-95336  
Germany  
+49 9229 9939-0  
www.fiatec.com

#### **Manufacturer:**

Powder Technology Inc.  
1300 Grey Fox Road  
USA-55112 Arden Hills, MN  
+1 952 894 -8737  
www.powdertechologyinc.com

#### **Contact person and E-mail:**

mattias.eber@fiatec.com

#### **The Safety data sheet is completed and validated by:**

Mediator ApS, Centervej 2, DK-6000 Kolding. Consultant: FJ

### 1.4. Emergency telephone number

Healthcare Professionals: +353 01 809 2566 (27/7)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

CLP (1272/2008):  
Flam. Sol. 2;H228

See full text of H-phrases in section 16.

### 2.2. Label elements



#### **Signal word:**

Warning

Flammable solid. (H228)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)

Ground/bond container and receiving equipment. (P240)

Use explosion-proof equipment. (P241)

Wear protective gloves/eyeprotection. (P280)

In case of fire: Use D-powder to extinguish. (P370 + P378)

### 2.3. Other hazards

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#### **Additional labelling:**

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#### **Additional warnings**

The product does not meet the criteria for PBT or vPvB.

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## SECTION 3: Composition/information on ingredients

### 3.1./3.2. Substances/Mixtures

Substance	EU-Index no. / REACH-Reg. no.	CAS-no.	EINECS-no.	CLP-classification	Wt/Wt %	Note
Iron, powder	- / -	7439-89-6	231-096-4	Flam. Sol. 2;H228	100	-

See full text of H-phrases in section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### **Inhalation:**

In case of discomfort: Seek fresh air.  
Seek medical advice in case of breathing difficulties.

#### **Ingestion:**

Wash out mouth thoroughly and drink 1-2 glasses of water in small sips.  
Seek medical advice in case of discomfort.

#### **Skin contact:**

Remove contaminated clothing.  
Wash skin with soap and water.  
Seek medical advice in case of persistent discomfort.

#### **Eye contact:**

Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

#### **Additional information:**

When obtaining medical advice, show the safety data sheet or label.

### 4.2. Most important symptoms and effects, both acute and delayed

May cause slight irritation to the skin and eyes.

### 4.3. Indication of any immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Use D-powder to extinguish.

### 5.2. Special hazards arising from the substance or mixture

Flammable solid.  
Avoid inhalation of vapour and fumes – seek fresh air.  
Exposure to decomposition products may cause a health hazard.

### 5.3. Advice for firefighters

Fire fighters should wear appropriate protective equipment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

See section 8 for type of protective equipment.  
Avoid static electricity.  
Avoid breathing and contact with skin and eyes.

### 6.2. Environmental precautions

Avoid unnecessary release to the environment.

### 6.3. Methods and material for containment and cleaning up

Use water mist to bind dust.  
Do not sweep – use vacuum cleaner to collect spillage.

### 6.4. Reference to other sections

See section 8 for type of protective equipment.  
See section 13 for instructions on disposal.

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

See section 8 for information about precautions for use and personal protective equipment.  
Use the product under well-ventilated conditions.  
Smoking and naked flames prohibited.

### 7.2. Conditions for safe storage, including any incompatibilities

The product should be stored safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc.  
Keep in tightly closed original packaging.  
Store in a dry, cool, well-ventilated area.

### 7.3. Specific end use(s)

See application section 1.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

The Health and Safety Authority, 2021 Code of Practice.

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#### DNEL/PNEC-values:

##### DNEL Iron, powder

	Workers	Consumers
Inhalation - Chronic Local	3 mg/m <sup>3</sup>	1,5 mg/m <sup>3</sup>
Oral - Chronic Systemic	-	0,71 mg/kg bw/day

### 8.2. Exposure controls

There are no exposure scenarios for this product.

#### Appropriate engineering controls:

Wear the personal protective equipment specified below.  
Wash hands before breaks, before using restroom facilities, and at the end of work.  
Do not eat, drink or smoke when using this product.

#### Personal protective equipment:



#### Respiratory protection:

In case of insufficient ventilation, wear respiratory protective equipment with P2 filter.  
Respiratory protective equipment shall comply with one of the following standards: EN 136/140/145.

#### Hand protection:

Wear protective gloves made of nitrile rubber (> 0.11 mm). Protective gloves conforming to EN 374.  
Penetration time: 480 min

#### Eye/face protection:

Wear safety goggles if there is a risk of dust contact with eyes.  
Eye protection conforming to EN 166.

#### Skin protection:

Special work clothing should be used.

#### Environmental exposure controls:

Ensure compliance with local regulations for emissions.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Powder
Colour:	Grey
Odour:	Odourless
Melting point/ Freezing Point (°C):	-
Boiling point or initial boiling point and boiling range (°C):	2861
Flammability:	Combustible dust
Lower and upper explosion limit (vol-%):	-
Flash point (°C):	> 700
Auto-ignition temperature (°C):	370
Decomposition temperature (°C):	-
pH:	-
Kinematic viscosity (mm <sup>2</sup> /s):	-
Solubility:	Insoluble
Partition coefficient n-octanol/water (log value)	-
Vapour pressure:	-
Density and/or relative density:	7,86 g/cm <sup>3</sup>
Relative vapour density:	-
Particle characteristics:	-

### 9.2. Other information

None.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data.

### 10.2. Chemical stability

May ignite spontaneously upon contact with air.

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid

Avoid heating and contact with ignition sources.  
Avoid contact with moisture and water.

### 10.5. Incompatible materials

Avoid contact with strong oxidising agents.  
Avoid contact with strong acids.

### 10.6. Hazardous decomposition products

No special precautions regarding contact with other materials at the recommended storage conditions.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity:

Based on the existing data, the classification is not met.

Substance	exposure	Species	Test	Result
Iron, powder	Oral	Rat	LD50	98,6 g/kg bw

#### Skin corrosion/irritation:

May cause slight irritation.

#### Serious eye damage/irritation:

May cause mechanical irritation.

#### Respiratory or skin sensitisation:

Based on the existing data, the classification is not met.

#### Germ cell mutagenicity:

Based on the existing data, the classification is not met.

#### Carcinogenicity:

Based on the existing data, the classification is not met.

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**Reproductive toxicity:**

Based on the existing data, the classification is not met.

**STOT-single exposure:**

Based on the existing data, the classification is not met.

**STOT-repeated exposure:**

Based on the existing data, the classification is not met.

**Aspiration hazard:**

Based on the existing data, the classification is not met.

**11.2. Information on other hazards**

Test data are not available.

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## SECTION 12: Ecological information

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**12.1. Toxicity**

Substance	Test duration	Species	Test	Result
No data.	-	-	-	-

**12.2. Persistence and degradability**

Substance	Biodegradability	Test	Result
No data.	-	-	-

**12.3. Bioaccumulative potential**

Substance	Potential bioaccumulation	LogPow
No data.	-	-

**12.4. Mobility in soil**

Test data are not available.

**12.5. Results of PBT and vPvB assessment**

The product does not meet the criteria for PBT or vPvB.

**12.6. Endocrine disrupting properties**

Test data are not available.

**12.7. Other adverse effects**

None.

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## SECTION 13: Disposal considerations

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**13.1. Waste treatment methods**

The product is covered by the regulations on dangerous waste.

Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

EWC-Code	Description
16 03 03	Inorganic wastes containing hazardous substances

**Specific labelling:**

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**Contaminated packaging:**

Empty packaging and residues must be disposed of through the municipal waste collection service for hazardous waste.

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## SECTION 14: Transport information

The product is covered by the rules for transport of dangerous goods.

### 14.1 -14.4.

#### ADR

14.1. UN number or ID number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group
3089	METAL POWDER, FLAMMABLE, N.O.S. (Iron, powder)	4.1	II

#### IMDG/IATA

14.1. UN number or ID number	14.2. UN proper shipping name	14.3. Transport hazard class(es)	14.4. Packing group
3089	METAL POWDER, FLAMMABLE, N.O.S. (Iron, powder)	4.1	II

### 14.5. Environmental hazards

-

### 14.6. Special precautions for user

-

### 14.7. Maritime transport in bulk according to IMO instruments

Not relevant.

## SECTION 15: Regulatory information

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

#### Sources:

The Health and Safety Authority, 2021 Code of Practice.

#### Additional labelling:

-

#### Restrictions for application:

-

#### Demands for specific education:

-

### 15.2. Chemical safety assessment

None.

## SECTION 16: Other information

According to EU regulation 1907/2006 (REACH)

#### Other information:

#### Sources:

EC regulation 1907/2006 (REACH), with amendments.

EC Regulation 1272/2008 (CLP), with amendments.

Directive 2008/98/EC

ECHA - The European Chemicals Agency

#### Full text of H-phrases as mentioned in section 2+3:

H228 Flammable solid.

#### Classification according to Regulation (EC) Nr. 1272/2008:

Flam. Sol. 2;H228

Expert judgement

# Material Safety Data Sheet



## **Abbreviations and acronyms used in the safety data sheet:**

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals. Regulation (EC) No 1907/2006.

CLP: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.

CAS-Number.: Chemical Abstracts Service number.

EC-Number.: EINECS and ELINCS Number (see also EINECS and ELINCS).

DNEL: Derived No Effect Level.

PNEC(s): Predicted No Effect Concentration(s).

STOT: Specific Target Organ Toxicity.

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).

LC50: Lethal Concentration to 50 % of a test population.

EC50: The effective concentration of substance that causes 50% of the maximum response.

PBT: Persistent, Bioaccumulative and Toxic.

vPvB: Very Persistent and Very Bioaccumulative.

NOEC: The highest tested concentration at which, in a study, no statistically significant effect is observed in the exposed population compared with an appropriate control group.

NOAEL: The highest tested dose or exposure level at which there are no statistically significant increases in the frequency or severity of adverse effects between the exposed population and an appropriate control group; some effects may be produced at this level, but they are not considered adverse or precursors of adverse effects.

## **Other:**

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

## **Minor changes have been made in following sections:**

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## **This material safety data sheet replaces version:**

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