

# Safety Data Sheet

## SDS acc. Hazard Communication Standard

REF: 740814.B.1000  
 Printing Date: 04.04.2023

MN Beads Type D (Bulk)  
 Date of Issue: 14.11.2022

Page: 1/7  
 Version: 3.2.2.2

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

#### 1.1 Product Identifier / Product Name

REF 740814.B.1000  
 Product Name MN Beads Type D (Bulk)

1 x 500 g Type D Steel Beads

#### 1.2 Relevant identified Uses of the Substance or Mixture and Uses advised against

##### Relevant identified uses

Product for analytical use.

Exposure Scenario Classification according REACh, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0  
 The exposure scenario is integrated into sections 1-16.

##### Uses advised against

not described

#### 1.3 Details of the Supplier and of the Safety Data Sheet

##### Manufactured by:

MACHEREY-NAGEL GmbH & Co. KG  
 Valencienner Str. 11, 52355 Düren, Germany  
 Phone: +49 2421 969 0

E-mail: [sds@mn-net.com](mailto:sds@mn-net.com) ([msds@mn-net.com](mailto:msds@mn-net.com))

#### 1.4 Emergency Telephone Number

Information not necessary.

You find our current versions of SDS in Internet:

<<http://www.mn-net.com/SDS>>

### SECTION 2: Hazard(s) Identification

#### 2.0 Classification of the complete Product

#### 2.1 Classification of the substance or mixture

500 g Type D Steel Beads

Signal Word Do not need labelling as hazardous  
 -

No Hazard Class

List of H phrases: see section 16.2

#### 2.2 Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

500 g Type D Steel Beads

Do not need labelling as hazardous  
 Signal Word: -

##### Label elements of the complete product

#### 2.3 Other Hazards

##### Possible Hazards from physicochemical Properties

According to our current status of knowledge and experience we state, that this product does not contain any substances, which - in accordance with EC regulations 1272/2008/EC, 1907/2006/EC and German Regulations for Hazardous goods - have to be declared as dangerous goods, either because of their applied concentration or because of their total amount in anyone kit. An individual package has considerably less hazardous potential.

##### Information pertaining to particular Risks to Human and possible Symptoms

##### Information pertaining to particular Risks to the Environment



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**Possible endocrine disrupting effects**  
 data not available

## SECTION 3: Composition/Information on Ingredients

### 3.1 Substances or 3.2 Mixtures

#### 500 g Type D Steel Beads

Substance name: *steel balls* (CAS 7439-89-6)  
 CAS No.: -

Substance rating: No criteria for classification or naming of chemical is not required.  
 Chemical Formula: Fe  
 Concentration: 98 - <100 %  
 acc. GHS: The criteria for classification are not fulfilled.

### 3.3 Remarks

When not listed, mixtures are added with water [CAS No. 7732-18-5] to 100%. List of Hazard and Precaution phrases: see section 16.2.

## SECTION 4: First-Aid Measures

### 4.1 Description of First-Aid Measures

Place insured person out of danger zone to fresh air immediately.

#### 4.1.1 After SKIN Contact

#### 4.1.2 After EYE Contact

#### 4.1.3 After INHALATION of Vapors

#### 4.1.4 After ORAL Intake

### 4.2 Most important Symptoms and Effects, both acute and delayed

### 4.3 Indication of any immediate Medical Attention and Special Treatment needed

No additionally recommendations. ---

## SECTION 5: Fire-Fighting Measures

### 5.1 Extinguishable Media

#### 5.1.1 Suitable extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used. Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

#### 5.1.2 Unsuitable extinguishing media

data not available

### 5.2 Special Hazards arising from the Substance or Mixture

None.

### 5.3 Advice for Firefighters

No, for listed product. Product package burns like paper or plastic.



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### 5.4 Additional Information

## SECTION 6: Accidental Release Measures

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedure

Not necessary.

### 6.2 Environmental Precautions

not necessary

### 6.3 Methods and Material for Containment and Cleaning up

Clean working area with water. Flush used water into sewer.

### 6.4 Reference to other Sections

## SECTION 7: Handling and Storage

### 7.1 Precautions for Safe Handling

### 7.2 Conditions for Safe Storage, including any Incompatibilities

The original product package allows a safe storage. Storage class (German chemical industry): see chapter 12.1

**Storage class (VCI):**

**Water hazard class (DE):**

#### 7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

### 7.3 Specific End Use(s)

Product for analytical use.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control Parameters

**500 g Type D Steel Beads**

Chemical: *steel balls* (CAS 7439-89-6)

CAS No.: -

### 8.2 Exposure Controls

Not necessary.

#### 8.2.1 Respiratory Protection

Not necessary.

#### 8.2.2 Skin protection / Hand protection

Not necessary.

#### 8.2.3 Eye / Face Protection

Not necessary.

#### 8.2.4 Skin Protection

Not necessary.

#### 8.2.5 Hygiene Measures

Information not necessary.

#### 8.2.6 Thermal hazards

data not available

### 8.3 Limitation and monitoring of environmental exposure

Information not necessary.



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## SECTION 9: Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

#### 500 g Type D Steel Beads

a) State of aggregation:	solid
b) Color:	black
c) Odor:	odorless
d) Melting Point:	data not available
e) Boiling Point:	data not available
f) Flammability:	data not available
g) Explosive Limits (lower / upper):	data not available
h) Flash Point:	data not available
i) Autoignition Temperature:	data not available
j) Decomposition Temperature:	data not available
k) pH Value:	data not available
l) Kinematic Viscosity:	data not available
m) Soluble in Water:	data not available
n) Partition Coefficient ( $o/w$ ):	data not available
o) Vapor Pressure (68°F):	data not available
p) Specific Gravity:	data not available
q) Relative Vapor Density ( $air=1$ ):	data not available
r) Particle Size:	3 mm

### 9.2 Further Information

Properties relevant to substance groups

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## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

None

### 10.2 Chemical Stability

no known instability.

### 10.3 Possibility of Hazardous Reactions

None.

### 10.4 Conditions to avoid

Not known.

### 10.5 Incompatible Materials

Not known. ---

### 10.6 Hazardous Decomposition Products

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

## SECTION 11: Toxicological Information

### 11.1 Information on Toxicological Effects

Following information is valid for pure chemicals. Quantitative data on the toxicity of this product are not available.

#### 500 g Type D Steel Beads

Chemical: *steel balls* (CAS 7439-89-6)

CAS No.: -

TSCA Inventory: listed (CAS 7439-89-6)

### 11.2 Other Hazards

Possible endocrine disrupting effects



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data not available

**Other Information**

no additional data available

### SECTION 12: Ecological Information

**12.1 Toxicity**

Following information is valid for pure chemicals.

**500 g Type D Steel Beads**

Chemical: *steel balls (CAS 7439-89-6)*

CAS No.: -

**12.2 Persistence and Degradability**

not necessary

**12.3 Bioaccumulative Potential**

not necessary

**12.4 Mobility in Soil**

not necessary

**12.5 Results of PBT and vPvB Assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

**12.6 Endocrine disrupting properties**

data not available

**12.7 Other Adverse Effects**

no additional data available

### SECTION 13: Disposal Considerations

Not necessary.

**13.1 Waste Treatment Methods**

GENERAL: Empty solids into municipal waste, empty liquids diluted into drains.

### SECTION 14: Transport Information

14.1. -14.4. Not necessary

**14.5 Environmental Hazards**

none

**14.6 Special Precautions for User**

not necessary

**14.7 Carriage of bulk cargo by sea in accordance with IMO instruments**

Not applicable.

### SECTION 15: Regulatory Information

**15.1 Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture**

**U.S. Federal Regulations**

OSHA "A Guide to The Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"

<https://www.osha.gov/dsg/hazcom/ghs.html>

29 CFR 1910.1200 Hazard communication.

**15.2 Chemical Safety Assessment**



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### SECTION 16: Other Information

#### 16.1 Changes compared to the last version

Between versions 3.2.2.2 and 2.2.2.2 following changes were applied: -0 product data corrected

#### 16.2 List of Hazard and Precaution Phrases

##### 16.2.1 List of relevant H Phrases

##### 16.2.2 List of relevant P Phrases

#### 16.3 Recommended Restriction on Use

None

#### 16.4 Sources of Key Data

KÜHN, BIRETT, Leaflets on hazardous materials, 2021

Directive 1999/92/EG Minimum requirements to improve the safety and health protection of workers at risk from potentially explosive atmospheres

SUVA .CH, limit values in the air at work 2009, revised on 01/2009

Regulation 790/2009/EU, adaptation of Regulation 1272/2008/EU to technical and scientific progress (1st ATP)

Regulation 453/2010/EU, adaptation of the REACH regulation 1907/2006/EG

Regulation 487/2013/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (4th ATP)

Regulation 1221/2015/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (7th ATP)

Regulation 776/2017/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (10th ATP)

Regulation 669/2018/EU, adaptation of Regulation 1272/2008/EC to technical and scientific progressText (11th ATP)

Regulation 1480/2018/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (13th ATP)

Regulation 521/2019/EU, adaptation of regulation 1272/2008/EG to technical and scientific progress (12th ATP)

TRGS 900, German rules of technology on limit values in the air at work, as of 03/2019

Regulation 217/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (14th ATP)

Regulation 878/2020/EU, adaptation of Annex II of the REACH regulation 1907/2006/EG

Regulation 1182/2020/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (15th ATP)

Regulation 643/2021/EU, adaptation of Annex VI, Part 1, of Regulation 1272/2008/EC to technical and scientific progress (16th ATP)

Regulation 849/2021/EU, adaptation of Annex VI, Part 3, of Regulation 1272/2008/EC to technical and scientific progress (17th ATP)

#### revisions/updates

*Reason for revision: 2014-02 Corrected structure of the sections according to Regulation 453/2010/EU, if necessary*

*2014-04 adjustment according Regulation 487/2013/EU*

*2016-03 adjustment according Regulation 1221/2015/EU*

*2017-11 adjustment according the ECHA registration dossier*

*2022-11 adjustment according Regulation 878/2020/EU*

#### 16.5 Further Information

MACHEREY-NAGEL GmbH & Co. KG provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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#### 16.6 Legend / Abbreviations

acc: according  
 ADR: Convention concerning the International Carriage of Dangerous Goods by Road  
 Act: acute  
 BAT: biological workplace tolerance value  
 CAO: Cargo Aircraft Only  
 Carc: carcinogen  
 CAS: Chemical Abstracts Service  
 CLP: Classification, Labelling and Packaging regulation  
 CMR: carcinogen, mutagen, reproduction toxic  
 Corr: corrosive  
 COD: chemical oxygen demand  
 CSCL: Chemical Substance Control Law (Jp)  
 Dam: damage  
 DNEL: Derived No-Effect Level (for workers)  
 derm: dermal  
 dog: dog



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EC10: Concentration causing a toxic effect in 10% of the test organisms  
 EC: European Community  
 EC-Nr: Substance number of the EC substance inventory  
 EmS: Guide to accident management measures on ships  
 EU: European Union  
 fish: fish (not specified)  
 GHS: Global Harmonized System of Classification and Labeling of Chemicals  
 gpg: guinea pig  
 ICAO: International Civil Aviation Organization  
 ihl: inhaled  
 IMDG: International Maritime Dangerous Goods Code  
 intrav: intravenous  
 ipt: intraperitoneal  
 ISHL: Industrial Safety and Health Law (Jp)  
 LC50: letale concentration 50%  
 LD50: letale dosis 50%  
 leuciscus idus: fisch, ide, orfe  
 MAK: maximum workplace concentration  
 Met: Metall  
 mus: mouse  
 Muta: mutagen  
 NIOSH: National Institute for Occupational Safety and Health (US)  
 NRD: Non-rapidly degradable  
 onchorhynchus mykiss: fisch, rainbow trout  
 orl: oral  
 OSHA: Occupational Safety and Health Administration  
 PAX: transport on passenger planes allowed  
 PBT: persistent, bioaccumulating, toxic substance  
 pH: pH value  
 pimephales promelas: fisch, fathead minnow  
 PNEC: Predicted No Effect Concentration  
 PROC 15: Process category 'for laboratory use'  
 PRTR: Law for PRTR and Promotion of Chemical Management (Jp)  
 PVC: polyvinyl chloride  
 quail: bird, quail  
 rat: rat  
 rb: rabbit  
 RD: rapidly degradable  
 RE: repeated  
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals  
 REF: item number, reference number  
 Reg.No.: rRegistration number  
 Repr: harmful to reproduction  
 Resp: respiratory  
 scu: sub cutan  
 RIP: REACH Implementations Projects  
 SDS: safety data sheet  
 Sens: sensitisation  
 STEL: short term exposure limit  
 STOT: Specific Target Organ Toxicity  
 SVHC: Substance of Very High Concern  
 t/a: tons per year  
 TCCA: Toxic Chemicals Control Act (S. Korea)  
 Tox: toxic  
 TSCA: The Toxic Substances Control Act (US)  
 TWA: time weighted average  
 TRGS: technical regulations (DE)  
 vPvB: very persistent, very bioaccumulating substance

### 16.7 Training Advice

Regular safety training. Multiple safety training of staffs about danger and protection by using hazards in working area. Additionally training and introduction of staffs for using these products.



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