

# SAFETY DATA SHEET

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Die in diesem Produktdatenblatt genannten Spezifikationen dienen nur zur Produktbeschreibung und beziehen sich auf den Zeitpunkt unmittelbar nach der Produktion bzw. Import des Produktes. Sie entsprechen den Angaben des Herstellers. Eine rechtsverbindliche Zusicherung bestimmter Eigenschaften oder der Eignung für einen bestimmten Einsatzzweck kann hieraus nicht abgeleitet werden. Durch unsachgemäßen Transport und / oder unsachgemäße Lagerung können sich Änderungen ergeben. Die Angaben in diesem Produktdatenblatt entbinden den Verarbeiter nicht von eigener Prüfung der Eigenschaften des Produktes und dessen Eignung für die vorgesehene Verwendung.

Trade name: Manganese Blue			Prin	t date: 03.11.23
	Version:	9 / DE	Date revis	ed: 19.10.2023
	Replaces	s Version: 8	/ DE	
SECTION 1: Identification of the subst	ance/mixture and of	the compan	y/undertaking	
1.1. Product identifier				
Manganese Blue				
1.2. Relevant identified uses of the sul	bstance or mixture and	d uses advise	d against	
Use of the substance/preparation				
Colourant				
1.3. Details of the supplier of the safet	y data sheet			
Address				
Deffner & Johann GmbH Mühläckerstraße 13				
D-97520 Röthlein				
Telefon-Nr.: + 49 (0) 9723   Fax-Nr.: + 49 (0) 9723				
E-Mail-Adresse: info@deffner-				
1.4. Emergency telephone number +49 (0) 9723 9350-0 (Mo - Fr: 7.30 - 1	5.00)			
+49 (0) 9723 9330-0 (100 - F1. 7.30 - 13	5.00)			
SECTION 2: Hazards identification ***				
2.1. Classification of the substance or	mixture			
This product is not classified hazardou	s in accordance with Re	egulation (EC)	No 1272/2008.	
2.2. Label elements				
Hazardous component(s) to be indicated	ted on label (Regulatio	on (EC) No. 12	72/2008)	
Supplemental information EUH210	Safety data sh	eet available o	n request	
2.3. Other hazards				
Dust loading. Possible dust explosion I	nazard.			
***				
This substance/mixture does not conta of 0.1% or higher. This substance/mixt bioaccumulative (vPvB) at concentration	ure does not contain co			
SECTION 3: Composition/information	on ingredients			
3.2. Mixtures				
Chemical characterization colourant mixture, inorganic/organic co	onstruction			
Further ingredients				
Calcium fluoride				
CAS No. Concentration >=	14542-23-5 = 1 <	10	%	
Advice: [5]			,.	
Note				
[5] Substance with EU occupational ex	posure limits			
SECTION 4: First aid measures				
4.1. Description of first aid measures				
General information				
In case of persistent symptoms consul-	t doctor.			
After inhelation				

After inhalation

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Remove the casualty into fresh air and keep him calm. In the event of symptoms take medical treatment.

# After skin contact

Wash off immediately with soap and water. Consult a doctor if skin irritation persists.

#### After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

#### After ingestion

Rinse mouth thoroughly with water. Call in a physician immediately and show him the Safety Data Sheet.

#### Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

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

Until now no symptoms known so far.

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

Hints for the physician / treatment Treat symptomatically

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media Water spray jet, Foam

#### Non suitable extinguishing media Full water jet, Carbon dioxide

# 5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Sulphur oxides; Carbon monoxide (CO); Carbon dioxide (CO2); Nitrogen oxides (NOx); Hydrogen sulfide (H2S); Hydrogen halide; Irritant and harmful combustion products.

#### 5.3. Advice for firefighters

# Special protective equipment for fire-fighting

Use self-contained breathing apparatus. Wear full protective suit.

#### Other information

Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

# **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Do not inhale dust. Use breathing apparatus if exposed to vapours/dust/aerosol. Ensure adequate ventilation. High risk of slipping due to leakage/spillage of product. Use personal protective clothing. Refer to protective measures listed in Sections 7 and 8. Remove persons to safety.

#### 6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water.

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

Avoid raising dust. Pick up mechanically. When picked up, treat material as prescribed under Section 13 "Disposal".

#### 6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

# Advice on safe handling

Avoid the formation and deposition of dust. Provide exhaust ventilation if dust is formed. Ensure adequate ventilation. Handle and open container with care. Provide suitable exhaust ventilation at the processing machines. Use breathing apparatus when transferring large quantities without exhaust ventilation facilities. If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Observe the usual precautions for handling

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chemicals.			
Advice on protection against fi	e and explosion		
Avoid dust formation. Take acti	on to prevent static	discharges. Earthing necessary orm an explosive mixture with ai	during loading operations. Keep ir. Do not smoke.
7.2. Conditions for safe storage	, including any in	compatibilities	
Hints on storage assembly			
	ls, Oxidising agents	s, Do not store together with food	dstuffs.
Further information on storage			
		Il-ventilated place. Protect from	direct sunlight. Protect from extreme
heat and cold.		·	Ũ
ECTION 8: Exposure controls/p	ersonal protect	ion	
8.1. Control parameters			
Exposure limit values			
zinc sulfide			
List		BAT-Werte Liste	
Туре	MAK		
Value		mg/m <sup>3</sup> Remarks: Zink und soine anergy	aniachan Varbindungan
(alveolengängige Fraktion)	gnancy group. C,	Remarks: Zink und seine anorga	anschen verbindungen
zinc sulfide			
List	MAK- UNC MAK	BAT-Werte Liste	
Type Value	MAR 2	mg/m³	
	—		anischen Verbindungen (einatembare
Calcium fluoride			
List	2000/39/E	-	
Туре	Indicative	Occupational Exposure Limit (E	U)
Value Demorke: Elucridee inergenie	2,5	mg/m <sup>3</sup>	
Remarks: Fluorides, inorganic			
Calcium fluoride			
List Value	TRGS 900	mg/m <sup>3</sup>	
	n resorption / sens	5	: Y; Status: 12/2007; Remarks: EU,
DFG		isinoution. It, Troghanoy group	, , otatao. 12/2007, rtomano. 20,
<b>Quartz</b> Type	MAK		
Value	0,05	mg/m³	
		emarks: Alveolengängige Fraktic	on, TRGS 559, TRGS-
Biological limit values			
Calcium fluoride			
List	TRGS 903		
Value	7,0	mg/g creatinine	
Parameter	Fluoride		
Testing material	Urine (U)		
Test date	End of ex	posure or end of shift (b)	
Calcium fluoride			
List Value	TRGS 903 4,0	3 mg/g	
		creatinine	
Parameter	Fluoride		
Testing material Test date	Urine (U) Before ne	xt shift (d)	
Other information			

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#### 8.2. Exposure controls

#### General protective and hygiene measures

Do not inhale dust/fumes/aerosols. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Use barrier skin cream. Observe the usual precautions for handling chemicals. Take off immediately all contaminated clothing.

# **Respiratory protection**

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Particle filter P2; Use breathing apparatus in dust-laden atmosphere.

#### Hand protection

Protective gloves

Observe the information of the glove manufacturers on permeability and breakthrough times and other workplace requirements.

# Eye protection

Safety glasses with side protection shield

#### **Body protection**

Clothing as usual in the chemical industry.

# **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and	I chemical properties
Physical state	Powder
Colour	see tradename
Odour	characteristic
Melting point Remarks	not determined
Freezing point Remarks	not determined
Boiling point or initial boiling point an Remarks	d boiling range not determined
Flammability not determined	
Upper and lower explosive limits	
Remarks	not determined
Flash point	
Remarks	Not applicable
Ignition temperature	
Remarks	not determined
Decomposition temperature	
Remarks	not determined
pH value	
Remarks	not determined
Viscosity	
Remarks	not determined
Solubility(ies)	
Remarks	not determined
Partition coefficient n-octanol/water (I	
Remarks	not determined
Vapour pressure	
Remarks	not determined
Density and/or relative density	not determined
Remarks	not determined
Relative vapour density	
Remarks	not determined
Particle characteristics	
Remarks	not determined
9.2. Other information	

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Odour threshold			
Remarks	not determined		
Evaporation rate (ether = 1) :			
Remarks	not determined		
Solubility in water Remarks	not determined		
Explosive properties			
evaluation	not determined		
Oxidising properties Remarks	not determined		
Other information	not determined		
None known			
ECTION 10: Stability and reactivi	ity		
10.1. Reactivity			
Product reacts with: Acids			
10.2. Chemical stability			
No hazardous reactions known.			
10.3. Possibility of hazardous rea	actions		
No hazardous reactions known.			
10.4. Conditions to avoid			
Static charges. Dust can form an	explosive mixture with air. Avoid all sources of ignition	n: heat, sparks, open flame.	
Decomposition temperature Remarks	not determined		
10.5. Incompatible materials			
	ns with strong alkalies and oxidising agents.		
10.6. Hazardous decomposition p			
	s (SOx), Hydrogen sulfide (H2S), nitrous oxides (NOx)	, Chlorine compounds	
ECTION 11: Toxicological inform	ation		
11.1 Information on hazard class	es as defined in Regulation (EC) No 1272/2008		
Acute oral toxicity			
Remarks	Based on available data, the classification criteria	are not met.	
Acute dermal toxicity Remarks	Based on available data, the classification criteria	are not met	
Acute inhalational toxicity	Dased on available data, the classification chiena	are not met.	
Remarks	Based on available data, the classification criteria	are not met.	
Skin corrosion/irritation			
Remarks	Based on available data, the classification criteria	are not met.	
Serious eye damage/irritation Remarks	Based on available data, the classification criteria	are not met.	
	Based on available data, the classification criteria	are not met.	
Sensitization Remarks			
Remarks Subacute, subchronic, chronic to	oxicity		
Remarks <b>Subacute, subchronic, chronic tc</b> Remarks	not determined		
Remarks Subacute, subchronic, chronic to	oxicity	to chronic respiratory irritation.	
Remarks <b>Subacute, subchronic, chronic to</b> Remarks Remarks Remarks Remarks	not determined Repeated or prolonged inhalation of dust may lead	d to chronic respiratory irritation. e skin irritation.	
Remarks Subacute, subchronic, chronic to Remarks Remarks Remarks Remarks Mutagenicity	not determined Repeated or prolonged inhalation of dust may lead Frequent persistent contact with the skin can caus Like any foreign body, particles (dust) can cause n	d to chronic respiratory irritation. e skin irritation. nechanical irritation.	
Remarks <b>Subacute, subchronic, chronic to</b> Remarks Remarks Remarks Remarks	not determined Repeated or prolonged inhalation of dust may lead Frequent persistent contact with the skin can caus	d to chronic respiratory irritation. e skin irritation. nechanical irritation.	

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Remarks Specific Target Organ Toxicity (ST	Based on available data, the classification criteria a	are not met.
Single exposure Remarks	Based on available data, the classification criteria a	are not met.
Repeated exposure Remarks	Based on available data, the classification criteria a	are not met.
Aspiration hazard Based on available data, the classi	fication criteria are not met.	
11.2 Information on other hazards		
Endocrine disrupting properties w No data available	ith respect to humans	
Other information No toxicological data are available.		
ECTION 12: Ecological informatio	n	
12.1. Toxicity		
General information not determined		
12.2. Persistence and degradability	/	
General information not determined		
Biodegradability Remarks	not determined	
12.3. Bioaccumulative potential		
General information not determined		
Partition coefficient n-octanol/wate Remarks	er (log value) not determined	
12.4. Mobility in soil		
General information not determined		
12.5. Results of PBT and vPvB ass	essment	
General information not determined		
Results of PBT and vPvB assessme This substance/mixture does not co of 0.1% or higher.	ent ontain components classified as persistent, bioaccum	ulative and toxic (PBT) at levels
This substance/mixture does not co concentrations of 0.1% or higher.	ontain components classified as very persistent and v	very bioaccumulative (vPvB) at
12.6 Endocrine disrupting properti	es	
Endocrine disrupting properties w No data available	ith respect to the envrionment	
12.7. Other adverse effects		
General information not determined		
General information / ecology Ecological data are not available.	Do not discharge product unmonitored into the enviro	nment.
ECTION 13: Disposal consideratio	ns	
13.1. Waste treatment methods		
Disposal recommendations for the	product	

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Product should be taken to a suitable and aut necessary after consultation with the waste d		
Disposal recommendations for packaging Packaging that cannot be cleaned should be Uncontaminated packaging may be taken for		
SECTION 14: Transport information		
Land transport ADR/RID		
The product does not constitute a hazardous	substance in land transport.	
Marine transport IMDG/GGVSee		
The product does not constitute a hazardous	substance in sea transport.	
Air transport ICAO/IATA		
The product does not constitute a hazardous	substance in air transport.	
SECTION 15: Regulatory information		
15.1. Safety, health and environmental regul	ations/legislation specific for the sub	ostance or mixture
( ),	er hazardous on of WGK according to Annex 1 No. 5.2	2 AwSV
Other regulations, restrictions and prohibition VDI 2263 "Dust fires and explosions; Danger,		
15.2. Chemical safety assessment		
For this preparation a chemical safety assess	ment has not been carried out.	
SECTION 16: Other information		
Abbreviations		
ADR: Accord européen relatif au transport int AGW: Arbeitsplatzgrenzwert	ernational des marchandises Dangereu	ises par Route
AwSV: Verordnung über Anlagen zum Umga substances that are hazardous to water)	ng mit wassergefährdenden Stoffen (Or	dinance on facilities for handling
BGW: Biologischer Grenzwert CAS: Chemical Abstracts Service		
DNEL: Derived no effect level		
EINECS: European Inventory of Existing Com		
ELINCS: European List of Notified Chemical GGVSee: Gefahrgutverordnung See	Substances	
IARC: International Agency for Research on (	Cancer	
IATA: International Air Transport Association ICAO: International Civil Aviation Organizatio	~	
IMDG: International Maritime Code for Dange		
LC: Lethal concentration		
LD: Lethal dose MAK: Maximale Arbeitsplatz-Konzentration		
NOEC: No observable effect concentration		
NOEL: No observable effect level	ion and Develo	
OECD: Organisation for Economic Co-operat OEL: Occupational exposure limit	ion and Development	
PBT: Persistent, Bioaccumulative and Toxic		
PNEC: Predicted no effect concentration	national ferroviciro do morchandiaco do	ndereuses
RID: Règlement concernant le transport inter TRGS: Technische Regeln für Gefahrstoffe	national terrovialle de marchandises da	าเมือเอตรอ
VDI: Verein Deutscher Ingenieure		
VLEP: Valeurs Limites d'exposition Professio	nnelle	

vPvB: Very persistent and very bioaccumulative WGK: Wassergefährdungsklasse (water hazard class)

#### Supplemental information

These data is based on our present knowledge and experience respectively supplier-information. This safety data sheet

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describes the product in regard to the requ certain properties. Existing laws and regula responsibility. It is the responsibility of the u and the respective intended purpose. A lial Relevant changes compared with the previ	ations are to be observed by the recipient user, to determine if the product is suitable bility for damages in connection with the u	of our products in own e for the deliberate operational area use of this information is excluded.