

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 21.07.2021 Version: 1.0

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

1.1. Product identifier	
Product form Product name Product code Type of product	 Article Remote alkaline battery RFRC220WT Transport information: Alkaline battery is exempt from dangerous goods, it is considered non-dangerous goods by the International Civil Aviation Organization(ICAO), the International Air Transport Association (IATA)DGR 62nd,IATA Special Provisions A123, International Maritime Dangerous Goods Regulations(IMDG)(39-18), Special Provision A123: "Examples of such batteries are: alkali-manganese, zinc-carbon and nickel-cadmium batteries. Any electrical battery having the potential of a dangerous evolution of heat must be prepared for transport as to prevent (a) a short[1]circuit (e.g by the effective insulation of exposed terminals); and (b) accidental activation. The words 'Not Restricted' and the Special Provision number must be included in the description of the substance on the Air Waybill as required by 8.2.6, when an Air Waybill is issued.
1.2. Relevant identified uses of the substa	ance or mixture and uses advised against
1.2.1. Relevant identified uses Intended for general public Use of the substance/mixture	: Electrical batteries and accumulators
1.2.2. Uses advised against Restrictions on use	: Do not open batteries
1.3. Details of the supplier of the safety d	ata sheet
Nedis B.V. De Tweeling 28 5215MC 's Hertogenbosch – The Netherlands T +31 735991055 www.nedis.com	
1.4. Emergency telephone number	
No additional information available	
SECTION 2: Hazards identification	
2.1. Classification of the substance or mi	xture
Classification according to Regulation (EC) No Not classified	. 1272/2008 [CLP]
Adverse physicochemical, human health and e	

Danger symbols/labeling in case of damaged and or ruptured battery.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains

LC) NO. 12/2/2000 [CLF]

Contains

: potassium hydroxide; caustic potash

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Iron	CAS-No.: 7439-89-6 EC-No.: 231-096-4	43	Not classified
Manganese	CAS-No.: 7439-96-5 EC-No.: 231-105-1	24	Not classified
ZINC	CAS-No.: 7440-66-6 EC-No.: 231-175-3	11	Not classified
Water	CAS-No.: 7732-18-5	10	Not classified
potassium hydroxide; caustic potash	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8	7,1	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
potassium hydroxide; caustic potash	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8	(0,5 ≤ C < 2) Skin Irrit. 2, H315 (0,5 ≤ C < 2) Eye Irrit. 2, H319 (2 ≤ C < 5) Skin Corr. 1B, H314 (5 ≤ C ≤ 100) Skin Corr. 1A, H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description	of first aid measures	

First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	Wash skin with plenty of water.
First-aid measures after eye contact	Rinse eyes with water as a precaution.
First-aid measures after ingestion	Call a poison center or a doctor if you feel unwell. Rinse mouth.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Dry powder. Foam. Water spray.
5.2. Special hazards arising from the subs	stance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

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5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release meas	ures
6.1. Personal precautions, protective equ	ipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containment	it and cleaning up
Methods for cleaning up Other information	Mechanically recover the product.Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	

For further information refer to section 13.

SECTION 7: Handling and stor	age	
7.1. Precautions for safe handling		
Precautions for safe handling Hygiene measures	Ensure good ventilation of the work station.Do not eat, drink or smoke when using this product.	
7.2. Conditions for safe storage, in	cluding any incompatibilities	
Storage conditions Storage temperature	 Store in a well-ventilated place. Keep cool. < 70 °C 	
7.3. Specific end use(s)		

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

No additional information available

8.2.2.2. Skin protection

No additional information available

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	· Solid	
Colour	: Not available	
Odour	Not available	
Odour threshold	• Not available	
Melting point	: Not available	
Freezing point	: Not applicable	2
Boiling point	Not available	-
Flammability	• Non flammab	ما
Lower explosion limit	: Not applicable	
Upper explosion limit	: Not applicable	
Flash point	: Not applicable	
•	: Not applicable	
Auto-ignition temperature	• Not available	3
Decomposition temperature	. Not available	
pH		
pH solution	: Not available	
Viscosity, kinematic	: Not applicable	Э
Solubility	: Not available	
Partition coefficient n-octanol/water (Log Kow)	: Not available	
Vapour pressure	: Not available	
Vapour pressure at 50°C	: Not available	
Density	: Not available	
Relative density	: Not available	
Relative vapour density at 20°C	: Not applicable	э
Particle size	: Not available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11.1. Information on hazard classes	as defined	in Regulation (EC) No 1272/2008
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	:	Not classified Not classified Not classified
Manganese (7439-96-5)		
LD50 oral rat		> 2000 mg/kg Source: ECHA
LC50 Inhalation - Rat (Dust/Mist)		> 5,14 mg/l Source: ECHA
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified
Remote alkaline battery		
Viscosity, kinematic		Not applicable

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Before neutralisation, the product may represent a danger to aquatic organisms.

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Hazardous to the aquatic environment, short–term : (acute)	Not classified	
	Not classified	
Not rapidly degradable		
Manganese (7439-96-5)		
LC50 - Fish [1]	> 3,6 mg/l Source: ECHA	
12.2. Persistence and degradability		
No additional information available		
12.3. Bioaccumulative potential		
No additional information available		
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		
No additional information available		

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

ADR	IMDG	ΙΑΤΑ	ADN	RID
4.1. UN number or ID n	umber	' '		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippin	g name	· · · · ·		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard o	class(es)	· · · · ·		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group		' '		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental haz	ards	· · · · · ·		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea Not applicable

Air transport Not applicable

Inland waterway transport Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not applicable.

REACH Annex XIV (Authorisation List)

Not applicable.

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Germany

Employment restrictions	 Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
Water hazard class (WGK)	: WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).
Storage class (LGK, TRGS 510)	: LGK 13 - Non-combustible solids.

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Joint storage table	:						
	•	LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A	
		LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B	
		LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C	
		LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B	
		LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13	
Joint storage not permitted for	:	LGK 1, LGK	6.2, LGK 7.		i.		
Joint storage with restrictions permitted for	:	LGK 4.1A, LC	GK 5.1C.				
Joint storage permitted for	:	LGK 2A, LGK	(2B, LGK 3, L(GK 4.1B, LGK 4	.2, LGK 4.3, LO	GK 5.1A, LGK 5.1B, LG	ίK
		LGK 6.1A, LC	GK 6.1B, LGK 6	6.1C, LGK 6.1D	, LGK 8A, LGK	8B, LGK 10, LGK 11, I	∟G
		LGK 13, LGK	3 10-13.				
Hazardous Incident Ordinance (12. BImSchV)	:	Is not subject	t of the Hazard	ous Incident Or	dinance (12. Bl	ImSchV)	
Netherlands							
ABM category	:	A(4) - low has environment	zard for aquatio	organisms, ma	ay have longteri	m hazardous effects in	ac
SZW-lijst van kankerverwekkende stoffen	:	None of the o	components are	listed			
SZW-lijst van mutagene stoffen	:	None of the o	components are	e listed			
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	None of the o	components are	e listed			
SZW-lijst van reprotoxische stoffen –	:	Manganese i	s listed				
Vruchtbaarheid							
SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	Manganese i	s listed				
Switzerland							
Storage class (LK)	:	NG - Non-ha	zardous				
15.2. Chemical safety assessment							

No chemical safety assessment has been carried out

SECTION 16: Other	information			
Abbreviations and acronyms:				
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways			
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road			
ATE	cute Toxicity Estimate			
BCF	Bioconcentration factor			
BLV	Biological limit value			
BOD	Biochemical oxygen demand (BOD)			
COD	Chemical oxygen demand (COD)			
DMEL	Derived Minimal Effect level			
DNEL	Derived-No Effect Level			
EC-No.	European Community number			
EC50	Median effective concentration			
EN	European Standard			
IARC	International Agency for Research on Cancer			
ΙΑΤΑ	International Air Transport Association			
IMDG	International Maritime Dangerous Goods			
LC50	Median lethal concentration			
LD50	Median lethal dose			
LOAEL	Lowest Observed Adverse Effect Level			

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Abbreviations and acronyms:		
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	

The classification complies with

: ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.