Report No.: MND241493QD_EU(En)2/2

Nomination No.: TJP24-007541

Design Report of Safety Data Sheet

Product Name：Ni-MH Battery

Warranty of Design：EU regulation No. 2020/878

Application Company Name：Xinxiang Xingtai New Energy Co., Ltd.

Application Company Address：Xiaokuai Village, Dakuai Town, Fengquan District,Xinxiang City,Henan

Contact Information：18153096289

24 Hour Emergency Call：**18153096289**

Inspection Date：2025/01/02

SGS-CSTC Standards Technical Services(Qingdao) Co.,Ltd

Authorised Signatory

2025-01-03

SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China t (86-0532) 68999367 www.sgsgroup.com.cn
中国・山东・青岛市崂山区株洲路143号通标中心 t (86-0532) 68999367 sgs.china@sgs.com

Safety Data Sheet

Ni-MH Battery

Version：V2.0.0.1
Report No.：MND241493QD_EU(En)2/2
Nomination No.：TJP24-007541
Creation Date：2025/01/02
Revision Date：2025/01/02

***Prepared according to EU regulation No. 2020/878**

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

1.1 Product identifier

Product Name	Ni-MH Battery
Product Model	See Attachment 1 See Attachment 2
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable
REACH Registration Number	-
UFI	AMG0-F09R-M00M-FES3

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

Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

1.3 Details of the supplier of the Safety Data Sheet

Name of the company	Xinxiang Xingtai New Energy Co., Ltd.
Address of the company	Xiaokuai Village, Dakuai Town, Fengquan District,Xinxiang City,Henan
Post code	——
Telephone number	18153096289
Fax number	——
E-mail address	xxsxtxny@163.com

1.4 Emergency telephone number

Emergency telephone number	18153096289
Opening hours	24h

2 Hazards identification

2.1 CLP classification according to Regulation（EC）No. 1272/2008

The product meets the definition of "article". In the Globally Harmonized Chemical Classification and Labeling System (GHS), the "articles" defined by the US Occupational Safety and Health Administration "Hazard Communication Standard" (29 CFR 1910.1200) or similar definitions do not fall within the scope of this system.

2.2 Label elements

Hazard pictograms	Not applicable
Signal word	Not applicable

Hazard statements

Hazard statements	Not applicable

Precautionary statements

◆ Prevention

Prevention	Not applicable

◆ Response

Response	Not applicable

◆ Storage

Storage	Not applicable

◆ Disposal

Disposal	Not applicable

2.3 Other hazards

◆ Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Iron	Not applicable
Metal Hydroxide Alloy	Insufficient information, temporarily unable to evaluate
Water	Insufficient information, temporarily unable to evaluate
nickel(ii) hydroxide	Not applicable
poly(vinyl formal)	Insufficient information, temporarily unable to evaluate
Potassium hydroxide	Insufficient information, temporarily unable to evaluate
carbo	Not applicable
Sodium hydroxide	Not applicable
pa66	Insufficient information, temporarily unable to evaluate
Cobalt oxide	Not applicable
Lithium hydroxide	Not applicable

◆ Results of endocrine disrupting properties assessment

Component	Results of endocrine disrupting properties assessment [according to (EU) No 2017/2100 or (EU) No 2018/605]
Iron	Insufficient information, temporarily unable to evaluate
Metal Hydroxide Alloy	Insufficient information, temporarily unable to evaluate
Water	Insufficient information, temporarily unable to evaluate
nickel(ii) hydroxide	Insufficient information, temporarily unable to evaluate
poly(vinyl formal)	Insufficient information, temporarily unable to evaluate
Potassium hydroxide	Insufficient information, temporarily unable to evaluate
carbo	Insufficient information, temporarily unable to evaluate
Sodium hydroxide	Insufficient information, temporarily unable to evaluate
pa66	Insufficient information, temporarily unable to evaluate

Cobalt oxide	Insufficient information, temporarily unable to evaluate
Lithium hydroxide	Insufficient information, temporarily unable to evaluate

◆ Other

	Not applicable.

3 Composition/information on ingredients

3.1 Substance/mixture

	Mixture

Component	Weight % content(or range)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific Conc. Limits, M-factors
Iron CAS：7439-89-6 EC：231-096-4 Index No.：-	54	Not Classified	-
Metal Hydroxide Alloy CAS：12196-72-4 EC：235-372-5 Index No.：-	11.5	Not Classified	-
Water CAS：7732-18-5 EC：231-791-2 Index No.：-	10	Not Classified	-
nickel(ii) hydroxide CAS：12054-48-7 EC：235-008-5 Index No.：028-008-00-X	8.22	Acute Toxicity – Oral，Category 4，H302；Skin Corrosion/Irritation，Category 2，H315；Sensitization – Skin，Category 1，H317；Acute Toxicity – Inhalation，Category 4，H332；Sensitization – Respiratory，Category 1，H334；Germ Cell Mutagenicity，Category 2，H341；Specific Target Organ Toxicity (Repeated Exposure)，Category 1，H372；Hazardous To The Aquatic Environment – Short-Term (Acute) Hazard，Category 1，H400；Hazardous To The Aquatic Environment – Long-Term (Chronic) Hazard，Category 1，H410；Carcinogenicity，Category 1，H350；Reproductive Toxicity，Category 1B，H360	-
poly(vinyl formal) CAS：9003-33-2 EC：- Index No.：-	6.5	No information available	-
Potassium hydroxide CAS：1310-58-3 EC：215-181-3 Index No.：019-002-00-8	5.1	Acute Toxicity – Oral，Category 4，H302；Skin Corrosion/Irritation，Category 1A，H314	H314B:2%≤C<5%|H319:0.5%≤C<2%|H314A:C≥5%|H315:0.5%≤C<2%
carbo CAS：7782-42-5 EC：231-955-3 Index No.：-	2	Not Classified	-
Sodium hydroxide CAS：1310-73-2 EC：215-185-5 Index No.：011-002-00-6	1.5	Skin Corrosion/Irritation，Category 1A，H314	H319:0.5%≤C<2%|H315:0.5%≤C<2%|H314A:C≥5%|H314B:2%≤C<5%

pa66 CAS：32131-17-2 EC：608-706-6 Index No.：-	0.85	Not Classified	-
Cobalt oxide CAS：1307-96-6 EC：215-154-6 Index No.：027-002-00-4	0.28	Acute Toxicity – Oral，Category 4，H302；Sensitization – Skin，Category 1，H317；Hazardous To The Aquatic Environment – Short-Term (Acute) Hazard，Category 1，H400；Hazardous To The Aquatic Environment – Long-Term (Chronic) Hazard，Category 1，H410	M=10
Lithium hydroxide CAS：1310-65-2 EC：215-183-4 Index No.：-	0.05	Acute Toxicity – Oral，Category 4，H302；Skin Corrosion/Irritation，Category 1B，H314；Eye Damage/Irritation，Category 1，H318	-

4 First-aid measures

4.1 Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of soap and water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

4.2 Most important symptoms/effects, acute and delayed

1	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

4.3 Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use extinguishing media suitable for surrounding area.
Unsuitable extinguishing media	Use fire extinguishers suitable for nickel hydrogen batteries.

5.2 Specific hazards arising from the substance or mixture

1	Development of hazardous combustion gases or vapor possible in the event of fire.
2	May expansion or decompose explosively when heated or involved in fire.

5.3 Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus（MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

1	Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
2	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3	Use personal protective equipment,do not breathe dust/fume.

6.2 Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

1	Cut off the source of the leak as much as possible.
2	Keep leaks in a ventilated place.
3	Isolation of contaminated areas and restrictions on access.
4	It is recommended that emergency personnel wear dust masks.
5	Collect the spill with a clean shovel and place it in a clean, dry, loosely closed container and move the container away from the leak.
6	Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

6.4 Reference to other sections

1	Personal Protective Equipment advice is contained in Section 8 of the SDS.
2	Disposal considerations advice is contained in Section 13 of the SDS.

7 Handling and storage

7.1 Precautions for safe handling

◆ Protective measures

1	Handling is performed in a well ventilated place.
2	Wear suitable protective equipment.
3	Avoid contact with skin and eyes.

◆ Measures to prevent fire

1	Keep away from heat/sparks/open flames/ hot surfaces.

◆ Measures to prevent aerosol and dust generation

1	Avoid formation of dust and aerosols.
2	Provide appropriate exhaust ventilation at places where dust is formed.

◆ Advice on general occupational hygiene

1	Wash hands and face after using of the substances.
2	Replace the contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

7.3 Specific end use(s)

1	In addition to use mentioned in the Section 1.2, unforeseen other specific end uses.

8 Exposure controls/personal protection

8.1 Control parameters

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
nickel(ii) hydroxide	Finland	-	0.05	-	-
	France	-	1	-	-
	Spain	-	0.1 (as Ni)	-	-
Potassium hydroxide	Denmark	-	2	-	2
	Finland	-	-	-	2
	France	-	-	-	2
	Norway	-	-	-	2
	Poland	-	0.5	-	1
	Spain	-	2	-	-
carbo	Denmark	-	2.5 (respirable aerosol)	-	5 (respirable aerosol)
	Finland	-	2	-	-
	France	-	2(respirable aerosol)	-	-
	Germany (DFG)	-	0.3	-	2.4
	Norway	-	5	-	-
	Poland	-	4	-	-
Sodium hydroxide	Denmark	-	2	-	2
	Finland	-	-	-	2
	France	-	2	-	-
	Norway	-	-	-	2
	Poland	-	0.5	-	1
	Romania	-	1	-	3
Cobalt oxide	Finland	-	0.02	-	-
	Romania	-	0.05	-	0.1
	Latvia	-	0.5	-	-
Lithium hydroxide	United Kingdom	-	-	-	1
	Ireland	-	-	-	1

	Canada - Ontario	-	1	-	-

◆ Biological limit values

Biological limit values	No relevant regulations

◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 300 series standard Determination of toxic substances in workplace air.

◆ Derived No effect level (DNEL)

Component	Route of exposure	DNEL for Workers			
		Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Iron	Inhalation	No data available	No data available	3 mg/m3	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Metal Hydroxide Alloy	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Water	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
nickel(ii) hydroxide	Inhalation	No data available	No data available	0.05 mg/m3	0.05 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
poly(vinyl formal)	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Potassium hydroxide	Inhalation	No data available	No data available	1 mg/m3	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
carbo	Inhalation	No data available	No data available	1.2 mg/m3	1.2 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Sodium hydroxide	Inhalation	No data available	No data available	1 mg/m3	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
pa66	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Cobalt oxide	Inhalation	No data available	No data available	0.0509 mg/m3	No data available

	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Lithium hydroxide	Inhalation	No data available	No data available	No data available	10 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available

◆ Predicted No Effect Concentration (PNEC)

Predicted No Effect Concentration (PNEC)	No information available

8.2 Exposure controls

8.2.1 Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Use explosion-proof electrical/ventilating/lighting/equipment.
4	Set up emergency exit and necessary risk-elimination area.

8.2.2 Personal protection equipment

General requirement	No special requirements, please see the description below.
Eye protection	In general situation, eye protection is not needed. In the production process, when contacting with vapour or dust, tightly fitting safety goggles.
Hand protection	In general situation, hand protection is not needed.
Respiratory protection	In general situation, respiratory protection is not needed. If exposure limits are exceeded or if irritation or other symptoms are experienced, wear dust proof mask or gas defence mask.
Skin and body protection	In general situation, skin and body protection are not needed.

8.2.3 Environmental exposure controls

Environmental exposure controls	No information available

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	cylindrical
Colour	No information available
Odor	No information available
Odor threshold	No information available
pH	No information available
Melting point/freezing point(°C)	No information available
Initial boiling point and boiling range(°C)	No information available
Flash point(Closed cup,°C)	Not applicable
Evaporation rate	Not applicable
Flammability	No information available

Upper/lower explosive limits[%(v/v)]	Upper limit：No information available；Lower limit：No information available
Vapor pressure(kPa)	Not applicable
Vapor density(Air = 1)	Not applicable
Relative density(Water=1)	No information available
Solubility(mg/L)	No information available
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(°C)	No information available
Decomposition temperature(°C)	No information available
Kinematic viscosity(mm^2/s)	Not applicable
Explosive properties	No information available
Oxidizing properties	No information available
Particle characteristics	No information available

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Information with regard to physical hazard classes	No information available

9.2.2 Other safety characteristics

Other safety characteristics	No information available

10 Stability and reactivity

Stability and reactivity

10.1 Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
10.2 Chemical stability	Stable under proper operation and storage conditions.
10.3 Possibility of hazardous reactions	The substance contains a certain amount of water, and may release hydrogen gas in contact with active metals.
10.4 Conditions to avoid	Incompatible materials, heat, flame and spark.
10.5 Incompatible materials	Halogen, interhalogen, strong oxidant, water and acids. Alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide. Acids, phenols, alcohols and nitro substituted hydrocarbon. Metal acetylide, halogen, interhalogen, halogen oxides, nitric acid, nitrous oxide, nitrates, nitrites, halogen oxyacid salts, chromates, permanganates, inorganic peroxides, metal oxides and peroxyformic acid.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological information

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

	Ni-MH Battery
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met

Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met

Acute toxicity

Component	LD_{50}(oral)	LD_{50}(dermal)	LC_{50}(inhalation,4h)
Iron	30000mg/kg(Rat)	No information available	No information available
Potassium hydroxide	273mg/kg(Rat)	No information available	No information available
nickel(ii) hydroxide	1515mg/kg(Rat)	> 2000mg/kg(Rat)	1.2mg/L(Rat)
Cobalt oxide	202mg/kg(Rat)	No information available	No information available
Lithium hydroxide	210mg/kg(Rat)	No information available	0.96mg/L(Rat)

Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP
Iron	Not Listed	Not Listed
Metal Hydroxide Alloy	Category 1	Category K
Water	Not Listed	Not Listed
nickel(ii) hydroxide	Category 1	Category K
poly(vinyl formal)	Not Listed	Not Listed
Potassium hydroxide	Not Listed	Not Listed
carbo	Not Listed	Not Listed
Sodium hydroxide	Not Listed	Not Listed
pa66	Not Listed	Not Listed
Cobalt oxide	Category 2B	Not Listed
Lithium hydroxide	Not Listed	Not Listed

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Component	Endocrine disrupting properties
Iron	No information available
Metal Hydroxide Alloy	No information available
Water	No information available
nickel(ii) hydroxide	No information available
poly(vinyl formal)	No information available
Potassium hydroxide	No information available
carbo	No information available
Sodium hydroxide	No information available

pa66	No information available
Cobalt oxide	No information available
Lithium hydroxide	No information available

11.2.2 Other Information

Other Information	See Section 11.1

12 Ecological information

12.1 Toxicity

Acute aquatic toxicity

Component	Fish	Crustaceans	Algae
Iron	LC_{50}：1.29mg/L (96h)(Fish)	No information available	No information available
nickel(ii) hydroxide	LC_{50}：77.13mg/L (96h)(Fish)	No information available	No information available
Cobalt oxide	LC_{50}：1.5mg/L (96h)(Fish)	No information available	No information available
Sodium hydroxide	LC_{50}: 196mg/L (96h)(Fish)	EC_{50}：40.4mg/L (48h)(Crustaceans)	No information available
carbo	LC_{50}: 100mg/L (96h)(Fish)	No information available	No information available
Lithium hydroxide	LC_{50}：62.2mg/L (96h)(Fish)	No information available	No information available

Chronic aquatic toxicity

Chronic aquatic toxicity	No information available

12.2 Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
carbo	Low	Low

12.3 Bioaccumulative potential

Component	Bioaccumulative potential	Comments
carbo	Low	Log Kow=0.5294

12.4 Mobility in soil

Component	Mobility in soil	Soil Organic Carbon-Water Partitioning Coefficient (Koc)
carbo	Low	23.74

12.5 Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Iron	Not applicable
Metal Hydroxide Alloy	Insufficient information, temporarily unable to evaluate
Water	Insufficient information, temporarily unable to evaluate

nickel(ii) hydroxide	Not applicable
poly(vinyl formal)	Insufficient information, temporarily unable to evaluate
Potassium hydroxide	Insufficient information, temporarily unable to evaluate
carbo	Not applicable
Sodium hydroxide	Not applicable
pa66	Insufficient information, temporarily unable to evaluate
Cobalt oxide	Not applicable
Lithium hydroxide	Not applicable

12.6 Endocrine disrupting properties

Component	Endocrine disrupting properties
Iron	No information available
Metal Hydroxide Alloy	No information available
Water	No information available
nickel(ii) hydroxide	No information available
poly(vinyl formal)	No information available
Potassium hydroxide	No information available
carbo	No information available
Sodium hydroxide	No information available
pa66	No information available
Cobalt oxide	No information available
Lithium hydroxide	No information available

12.7 Other adverse effects

	No information available

13 Disposal considerations

13.1 Waste treatment methods

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.

14 Transport information

Attachment 1 Nickel Metal Hydrogen Battery Label and Mark

Transporting Label	

IMDG-CODE

NOTE: Nickel-metal hydride cells or batteries packed with or contained in equipment and nickel-metal hydride button cells are not subject to the provisions of this Code.(See UN3496 SP963)

UN number	3496
UN proper shipping name	BATTERIES, NICKEL-METAL HYDRIDE
Transport hazard class	9
Transport subsidiary hazard class	None
Packing group	The packagings must conform to package instructions of UN number
Marine pollutant（Yes or no）	No

IATA-DGR

IATA-DGR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS （See UN3496 SPA199 related regulations）

UN-ADR

UN-ADR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Maritime transport in bulk according to IMO instruments

◆Transport in bulk according to Annex II of MARPOL and the IBC code

	Not Available

◆Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

	Not Available

◆Transport in bulk in accordance with the IGC Code

	Not Available

Attachment 2 Nickel Metal Hydrogen Battery Label and Mark

Transporting Label	Not applicable

IMDG-CODE

IMDG-CODE	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS（See UN3496 SP963 related regulations: They are not subject to other provisions of this Code provided that they are loaded in a cargo transport unit in a total quantity of less than 100 kg gross mass.）

IATA-DGR

IATA-DGR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS （See UN3496 SPA199 related regulations）

UN-ADR

UN-ADR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Maritime transport in bulk according to IMO instruments

◆Transport in bulk according to Annex II of MARPOL and the IBC code

	Not Available

◆Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

	Not Available

◆Transport in bulk in accordance with the IGC Code

	Not Available

15 Regulatory information

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

International chemical inventory

Component	EC inventory	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AIIC	ENCS
Iron	√	√	√	√	√	√	√	√	√
Metal Hydroxide Alloy	√	√	×	×	×	×	√	×	×
Water	√	√	√	√	√	√	√	√	√
nickel(ii) hydroxide	√	√	√	√	√	√	√	√	√
poly(vinyl formal)	×	√	√	√	×	√	√	√	×
Potassium hydroxide	√	√	√	√	√	√	√	√	√
carbo	√	√	√	√	√	√	√	√	√
Sodium hydroxide	√	√	√	√	√	√	√	√	√
pa66	×	√	√	√	√	√	√	√	√
Cobalt oxide	√	√	√	√	√	√	√	√	√
Lithium hydroxide	√	√	√	√	√	√	√	√	√

[EC inventory] European Inventory of Existing Commercial Chemical Substances
[TSCA] United States Toxic Substances Control Act Inventory
[DSL] Canadian Domestic Substances List
[IECSC] China Inventory of Existing Chemical Substances
[NZIoC] New Zealand Inventory of Chemicals
[PICCS] Philippines Inventory of Chemicals and Chemical Substances
[KECI] Korea Existing Chemicals Inventory
[AIIC] Australian. Inventory of Industrial Chemical (AIIC)
[ENCS] Japan Inventory of Existing & New Chemical Substances

European chemical inventory

Component	A	B	C	D	E	F	G	H	I
Iron	×	×	×	√	√	×	×	×	×
Metal Hydroxide Alloy	×	×	√	√	×	×	×	×	×
Water	×	×	×	√	×	×	×	×	×
nickel(ii) hydroxide	×	×	√	√	√	×	√	×	×
poly(vinyl formal)	×	×	×	×	×	×	×	×	×
Potassium hydroxide	×	×	×	√	√	×	×	×	×
carbo	×	×	×	√	√	×	×	×	×
Sodium hydroxide	×	×	×	√	√	×	×	×	×
pa66	×	×	×	√	×	×	×	×	×
Cobalt oxide	×	×	×	√	√	×	×	×	×
Lithium hydroxide	×	×	×	√	√	×	×	×	×

[A] Candidate list of Substances of Very High Concern for authorization under EU REACH regulation

[B] Substances requiring authorisation under EU REACH regulation
[C] Substances restricted under EU REACH
[D] Pre-registered substances under EU REACH
[E] Registered substances under EU REACH
[F] Substance Evaluation – CoRAP under EU REACH
[G] List of priority substances under EU water policy （Directive 2455/2001/EC）
[H] Substances subject to POPs Regulation
[I] Substances proposed as POPs

Note:
"√" Indicates that the substance included in the regulations.
"×" No data or not included in the regulations.

15.2 Chemical safety assessment

	No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16 Other information

Information on revision

Creation Date	2025/01/02
Revision Date	2025/01/02
Reason for revision	-

Reference

[1] IPCS: The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home。
[2] IARC, website: http://www.iarc.fr/。
[3] OECD: The Global Portal to Information on Chemical Substances, website: https://www.echemportal.org/echemportal/。
[4] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple。
[5] NLM: ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp。
[6] EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/。
[7] U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg。
[8] Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/。

Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG-CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC_{50}	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD_{50}	Lethal Dose 50%	NTP	National Toxicology Program
EC_{50}	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC_X	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
P_{OW}	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor		

Disclaimer

This Safety Data Sheet (SDS) was prepared according to REACH Regulation The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume

responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

Annex 1

AA100mAh、AA150mAh、AA200mAh、AA250mAh、AA300mAh、AA350mAh、AA400mAh、AA450mAh、AA500mAh、AA600mAh、AA700mAh、AA800mAh、AA900mAh、AA1000mAh、AA1100mAh、AA1200mAh、AA1500mAh;
AAA100mAh、AAA150mAh、AAA200mAh、AAA250mAh、AAA300mAh、AAA350mAh、AAA400mAh、AAA450mAh、AAA500mAh、AAA600mAh;
2/3AAA100mAh、2/3AAA120mAh、2/3AAA150mAh、2/3AAA180mAh、2/3AAA200mAh、 2/3AAA 300mAh.

Annex 2

2/3AA100mAh 、 2/3AA120mAh 、 2/3AA150mAh 、 2/3AA180mAh 、 2/3AA200mAh 、 2/3AA250mAh 、 2/3AA300mAh、2/3AA350mAh、2/3AA400mAh、2/3AA450mAh/2/3AA 500mAh、2/3AA 600mAh.