



中国认可
检验
INSPECTION
CNAS IB0071



NO.2622020083

SAFETY DATASHEET

Product Name: Nickel Cobalt Manganese Hydroxide

Effective Date: 2022-02-28

Compiler: Chen Yushuang

Checker: Liu Linlin

Approver: Zhangxiangjin



Shanghai Institute of Chemical Industry Testing Co., Ltd.



声 明

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Huayou New Energy Technology (Quzhou) Co., Ltd.

SAFETY DATA SHEET

Nickel Cobalt Manganese Hydroxide

SECTION1 PRODUCT AND COMPANY IDENTIFICATION

Product name: Nickel Cobalt Manganese Hydroxide

Company: Huayou New Energy Technology (Quzhou) Co., Ltd.

Address: No. 1, 9th Building, No. 18, Nianxin Road, Quzhou City, Zhejiang Province, 324000, P.R.China

Email: xuyulan@huayou.com

Fax: 86-570-8059022

Emergency Phone: 86-570-8059022

Recommend use of the chemical and restrictions on use: Industrial use.

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SECTION2 HAZARDS IDENTIFICATION

GHS Classification:

Physical Hazards:

Not Classified

Health Hazards:

Classification not possible

Environmental Hazards:

Classification not possible

The product lacks data or information for classification, and may have potentially unknown hazards to human health and the environment.

The hazards not mentioned are not applicable or no data available.

Label Elements:

Pictogram:

Unknown

Signal Word:

Unknown

Hazard Statements:

Unknown

Prevention Precautionary Statements:

Unknown

Response Precautionary Statements:

Unknown

Storage Precautionary Statements:

Unknown

Disposal Precautionary Statements:

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazards:

No data available.

SECTION3 INFORMATION ON INGREDIENTS

Product name: Nickel Cobalt Manganese Hydroxide

Ingredient	Concentration	CAS No.	EC No.
Substances:			
Nickel cobalt manganese hydroxide	100%	189139-63-7	/

SECTION4 FIRST-AID MEASURES**Skin Exposure:**

In case of skin contact, flush with copious amounts of water. If irritation persists, Call a physician.

Eye Exposure:

In case of contacting with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. If irritation persists, Call a physician.

Inhalation Exposure:

If inhaled, remove to fresh air immediately. If the person feels unwell, Call a physician.

Oral Exposure:

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Most Important Symptoms/Effects, Acute and Delayed:

No data available.

Indication of Immediate Medical Attention and Special Treatment Needed, if Necessary:

No data available.

SECTION5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Suitable: Dry chemical, Water spray, Carbon dioxide or appropriate foam.

Specific Hazards Arising from the Chemical:

Take care as it may decompose upon combustion or in high temperatures to generate nickel oxides, cobalt oxides, manganese oxides.

Special Protective Action for Fire-fighters:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fire-extinguishing work is done from the windward. Uninvolved persons should evacuate to a safe place.

SECTION6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment. Remove all sources of ignition. Avoid breathing dust. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to noninvolved personnel should be controlled around the leakage area by roping off.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Avoid entering drains.

Methods and Materials for Containment and Cleaning up:

Sweep up with spade and transfer to a dry, clean, lidded container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

SECTION7 HANDLING AND STORAGE

Precautions for Safe Handling:

Operators should be trained and strictly abide by operating procedures. Wear appropriate protective clothing and gloves. Avoid inhalation. Avoid contacting with eyes, skin and clothing. Prevent generation of dust. Handling is performed in a well ventilated place. Keep away from ignition sources, heat and flame. Handling and unloading should be light, to prevent packaging broken, damp and cause losses. Working place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from ignition sources, heat and flame. Storage place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

SECTION8 EXPOSURE CONTROL/PPE

Control Parameters:

GBZ 2.1-2019 Occupational Exposure Limits for Hazardous Agents in the Workplace - Part 1: Chemical Hazardous Agents:

Metallic nickel and insoluble nickel compounds: PC-TWA $1\text{mg}/\text{m}^3$ (Remark: G2B)

Cobalt and compounds, as Co: PC-TWA $0.05\text{mg}/\text{m}^3$; PC-STEL $0.1\text{mg}/\text{m}^3$ Remarks: G2B; Sensitization

Manganese and inorganic compounds, as MnO₂: PC-TWA $0.15\text{mg}/\text{m}^3$

ACGIH:

Not set up.

Appropriate Engineering Controls:

Mechanical exhaust required. Safety shower and eye bath.

Individual Protection Measures:

Eye/Face Protection:

Wear chemical safety glasses.

Skin Protection:

Hand Protection: Wear compatible protective gloves.

Body Protection: Wear appropriate protective clothing.

Respiratory Protection:

Wear government approved respirator.

Thermal Hazards:

No data available.

Other Protect:

No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION9 PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Black powder
Odor:	Weak odor
pH Value:	Not applicable
Solubility:	Insoluble in water
Melting Point/Freezing Point:	>350°C
Boiling Point, Initial Boiling Point and Boiling Range:	Not applicable
Flash Point (Closed Cup):	Not applicable
Density/Relative Density:	No data available
Kinematic Viscosity:	Not applicable
Lower/Upper Explosion Limit/Flammability Limit:	No data available
Vapour Pressure:	No data available
Relative Vapor Density:	No data available
Partition Coefficient N-Octanol/Water (Log Value):	No data available
Autoignition Temperature:	No data available
Decomposition Temperature:	No data available
Particle Characteristics:	No data available
Flammability (Solid, Gas):	The substance is not classified in Division 4.1 Flammable Solids.

SECTION10 STABILITY AND REACTIVITY**Reactivity:**

No data available.

Chemical Stability:

Stable under normal temperatures and pressures.

Possibility of Hazardous Reactions:

No data available.

Conditions to Avoid:

No data available.

Incompatible Materials:

No data available.

Hazardous Decomposition Products:

Nickel oxides, cobalt oxides, manganese oxides.

SECTION11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

No data available.

Skin Corrosion/Irritation:

No data available.

Serious Eye Damage/Irritation:

No data available.

Respiratory Sensitization:

No data available.

Skin Sensitization:

No data available.

Germ Cell Mutagenicity:

No data available.

Carcinogenicity:

No data available.

Reproductive Toxicity:

No data available.

Specific Target Organ Toxicity -Single Exposure:

No data available.

Specific Target Organ Toxicity -Repeated Exposure:

No data available.

Aspiration Hazard:

No data available.

SECTION12 ECOLOGICAL INFORMATION

Toxicity:

No data available.

Persistence and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION13 DISPOSAL CONSIDERATION**Disposal Methods:**

Recycle as far as possible. If unable to recycle, it is recommended to use incineration method for disposal under supervision. This product should not be disposed of by discharge into sewers. Return empty containers to the manufacturer or dispose of them in accordance with national and local regulations. Follow the relevant provisions of national and local regulations before disposal. It is recommended to be disposed of by a qualified chemical waste treatment department.

SECTION14 TRANSPORT INFORMATION

RID/ADR(2021 Edition): The product is not subject to RID/ADR.

IATA DGR(63rd Edition): The product is not subject to IATA DGR.

IMO IMDG CODE(2020 Edition): The product is not subject to IMO IMDG Code.

Environmental Hazards: Unknown.

Special Precautions for User: No data available.

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

SECTION15 REGULATORY INFORMATION

Montreal Protocol: Not listed.

Stockholm Convention: Not listed.

Rotterdam Convention: Not listed.

EINECS/ELINCS: Not listed.

TSCA: Not listed.

IECSC: Not listed.

SECTION16 OTHER INFORMATION

Preparation Date:
2022-02-28

Preparation Department:

Shanghai Research Institute of Chemical Industry Testing Co., Ltd.
Tel (Fax): +86-21-52815377/31765555

Revision:

0

Reference Standard:

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), 9th revised edition

Abbreviations and Acronyms:

CAS: Chemical Abstracts Service EC: European Commission ACGIH: American Conference of Governmental Industrial Hygienists PC-TWA: Permissible concentration-time weighted average PC-STEL: Permissible concentration-short term exposure limit G2B: Possibly carcinogenic to humans Sensitization: The substance may have allergenic effects ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulations concerning the International Carriage of Dangerous Goods by Rail IMO IMDG CODE: International Maritime Organization International Maritime Dangerous Goods Code IATA DGR: International Air Transport Association Dangerous Goods Regulations MARPOL: International Convention for the Prevention of Pollution from Ships IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances TSCA: Toxic Substances Control Act IECSC: Inventory of Existing Chemical Substances in China

Other Information:

This SDS is compiled based on the information such as ingredients provided by the applicant and our current knowledge. This SDS shall be used only as a guide. The users of this SDS must make independent judgments on the correctness and completeness and then decide its suitability according to the actual situation. The users should take the relevant legal responsibilities for the consequences of use.