

## Material Safety Data Sheet (MSDS) Report

Anhui JBH Medical Apparatus Co., Ltd. Applicant:

No. 116 Qicang Road, Mingguang City, Chuzhou City, Anhui Province, 239400, China.

Sample Description:

Product name Electric Wheelchair

Product code D23

Polymer lithium-ion batteries Battery type

24V Nominal voltage

Nominal capacity 6Ah/144Wh

Battery dimension 270mm\*98mm\*55mm

Data reviewed Mar 02, 2022

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Approved By:

Pingo Zhang, Manager

On behalf of Shanghai Ruifu Co., Ltd.

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(29 CFR 1910.1200-OSHA HazCom 2012)

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#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier** 

Product name : Electric Wheelchair

Product code : D23

Battery type : Polymer lithium-ion batteries

Nominal voltage : 24V

Nominal capacity : 6Ah/144Wh

Battery dimension : 270mm\*98mm\*55mm

Recommended use of the chemical and restrictions on use Identified use : Portable transportation tool

Details of the supplier of the safety data

sheet

Anhui JBH Medical Apparatus Co., Ltd. No. 116 Qicang Road, Mingguang City, Chuzhou City, Anhui Province, 239400,

China.

**Emergency telephone number** 

Tel: +86-18936033123 or contact your local

emergency center.

Product Information

Tel: +86-18936033123/025-85780899

E-mail: sunny@jbhmedical.com

#### **SECTION 2. HAZARDS IDENTIFICATION**

## GHS-Classification(29 CFR 1910.1200-OSHA HazCom 2012)

Hazard classification : Flammable solids, Category 1

Flammable solid.

Skin sensitisation, Category 1
May cause an allergic skin reaction.

Carcinogenicity, Category 2
Suspected of causing cancer.

Specific target organ toxicity - repeated exposure, Category 2,

Inhalation

May cause damage to organs through prolonged or repeated

exposure if inhaled.

## **GHS-Labelling(29 CFR 1910.1200-OSHA HazCom 2012)**

Symbol(s) :







Signal word : Danger

Hazard statements : H228 Flammable solid.

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	H317 H351 H373	May cause an allergic skin reaction. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if inhaled.	
Precautionary statements :	Prevention:		
	P201	Obtain special instructions before use.	
	P202	Do not handle until all safety precautions have	
		been read and understood.	
	P210	Keep away from heat/sparks/open flames/hot	
	5000	surfaces. No smoking.	
	P223	Do not allow contact with water.	
		Handle under inert gas. Protect from moisture.	
	P240	Ground/bond container and receiving equipment.	
	P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.	
	P260	Do not breathe dust/ fume/ gas/ mist/ vapours/	
	1 200	spray.	
	P272	Contaminated work clothing should not be allowed	
		out of the workplace.	
	P280	Wear protective gloves/ protective clothing/ eye	
		protection/ face protection.	
	Response:		
		IF ON SKIN: Wash with plenty of water.	
	P308 + P313	IF exposed or concerned: Get medical advice/	
	D222   D212	attention. If skin irritation or rash occurs: Get medical	
	F333 + F313	advice/ attention.	
	P335 + P334	Brush off loose particles from skin. Immerse in	
		cool water/ wrap in wet bandages.	
	P362 + P364	Take off contaminated clothing and wash it before	
		reuse.	
	P370 + P378	In case of fire: Use dry sand, dry chemical or	
		alcohol-resistant foam to extinguish.	
	Storage:		
		Store in a dry place. Store in a closed container.	
	P405	Store locked up.	
	Disposal:	Diapage of contents/ container to an engraved	
	P501	Dispose of contents/ container to an approved waste disposal plant.	
		wasie עוטףטטמו אומווו.	

#### Other hazards

This product containing lithium-ion battery is an article pursuant to 29 CFR 1910.1200 and, as such, is not subject to the OSHA Hazard Communication Standard requirement(HazCom 2012). The information contained in this Material Safety Data Sheet contains valuable information critical to the safe handling and proper use of the product.

The above GHS hazardous classification are derived based on the internal ingredients of battery under extreme exposure scenarios, such as breakage, leakage or being abused.

As a solid, manufactured article, exposure to hazardous ingredients is not expected with normal use.

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The potential for exposure should not exist unless the battery leaks, is exposed to high temperatures or is mechanically, electrically or physically abused/damaged. If the battery is compromised and starts to leak, based upon the battery ingredients, the contents are classified as hazardous.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product form : Manufactured article

#### Hazardous components

Chemical name	++CAS Number	Percent of Total Weight
Organic Carbonate	Not applicable	13-18%
Carbon(Graphite)	7782-42-5	12-15%
Copper Foil	7440-50-8	7-10%
Aluminum Foil	7429-90-5	5%
Nickel	7440-02-0	2-5%
Lithium Salts	Not applicable	1-5%
Lithium Cobalt Oxide	12190-79-3	2-3%

#### **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : Move to fresh air.

If breathed in, move person into fresh air.

Keep patient warm and at rest.

If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

Wash contaminated clothing before re-use.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses. Protect unharmed eve.

If swallowed : Get medical attention immediately.

> Do NOT induce vomiting. Rinse mouth with water.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and

delaved

: None known

Notes to physician : No hazards which require special first aid measures.

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#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray/Foam/Carbon dioxide (CO2)/Dry chemical

Unsuitable extinguishing

media

ng : High volume water jet

Specific hazards during

firefighting

: This battery product is considered safe under normal use

conditions, but it will burn in case of fire.

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: Toxic fumes and acrid smoke/irritating fumes.

Specific extinguishing

Further information

methods

: Product is compatible with standard fire-fighting agents.

: Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment

for firefighters

: In the event of fire, wear self-contained breathing apparatus

and full protective gear.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

: In the event of fire and breakage, please ensure that:

Use personal protective equipment.

Ensure adequate ventilation.

Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

Methods and materials for

containment and cleaning up

: If possible, carefully neutralize spilled electrolyte with soda

ash, sodium bicarbonate, lime, etc.

Other information : Comply with all applicable national and local regulations.

### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling : Battery

Use only approved chargers and procedures.

Improperly charging a cell may cause the cell or battery to

flame or damage.

Do not drop battery, puncture, or attempt to open battery

case.

Avoid contact with the internal components of a battery.

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Do not subject product to open flame or fire and avoid situations that could cause arcing between terminals.

For personal protection see section 8.

Conditions for safe storage : Store batteries under roof in cool, dry, well-ventilated areas

separated from incompatible materials and from activities that

may create flames, spark, or heat.

Observe label precautions.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

**Engineering measures** : Store sealed batteries at ambient temperature.

Never recharge batteries in an unventilated, enclosed space.

Do not subject product to open flame or fire.

Personal protective equipment

Respiratory protection : None required under normal conditions of use.

Hand protection : None required under normal conditions of use.

Eye protection : None required under normal conditions of use.

Skin and body protection : None required under normal conditions of use.

Hygiene measures : Wash hands before breaks and at the end of workday.

When using do not eat or drink. When using do not smoke.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state : Manufactured article

Colour : Black, with silver or red or yellow or blue or pink (multicolor)

Odour : Odorless

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability : Non flammable

Upper explosion limit : No data available

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Lower explosion limit : No data available

Vapour pressure : Not applicable

Relative vapour density : No data available

Relative density : No data available

Density : No data available

Water solubility : Insoluble in water

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Thermal decomposition : No data available

Viscosity, dynamic : Not applicable

Viscosity, kinematic : No applicable

Oxidizing properties : No data available

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : This product is non-reactive under normal conditions of use,

storage and transport.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous

reactions

: Product will not undergo hazardous polymerization.

Incompatible materials : None known.

Hazardous decomposition

products

: None under normal operating conditions.

Carbon dioxide and hydrogen fluoride gas may be generated

during combustion of battery.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### Acute toxicity

Not classified based on available information.

#### Skin corrosion/irritation

Not classified based on available information.

## Serious eye damage/eye irritation

Not classified based on available information.

#### Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

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Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

**Aspiration toxicity** 

Not classified based on available information.

Further information Carcinogenicity:

**IARC** Cobalt in lithium cobalt oxide is considered as

a class 2B carcinogen by IARC.

**OSHA** No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

**NTP** None Known to be human carcinogen

### **SECTION 12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

When properly used or disposed, the batteries do not present environmental hazards.

Do not let internal components enter marine environment.

Avoid release to waterways, wastewater or groundwater.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

### **SECTION 13. DISPOSAL CONSIDERATIONS**

## **Disposal methods**

General advice : This battery should be recycled if possible and should not be

allowed to enter drains, water courses or the soil.

This product must be disposed of in a safe manner (send to a

licensed waste management company).

Dispose of in accordance with all applicable national and local

regulations.

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### **SECTION 14. TRANSPORT INFORMATION**

## International transport regulations

### **GROUND TRANSPORT (US DOT, 49 CFR 172)**

UN Number: 3171

Proper Shipping Name: Battery-powered vehicle or battery-powered equipment

Hazard classes: 9(miscellaneous hazardous materials)

Packaging group: Not applicable(n/a)



## SEA TRANSPORT/INTERNATIONAL MARITIME DANGEROUS GOODS(IMDG, 2020 edition amendment 40-20)

UN Number: 3171

Proper Shipping Name: Battery-powered vehicle or battery-powered equipment

Hazard classes: 9

Packaging group: Not applicable(n/a) Special provision: 240, 961, 962, 971

LQ: No EQ: No

EmS No.: F-A,S-I Marine pollutant: No



### AIR TRANSPORT/INTERNATIONAL AIR TRANSPORT ASSOCIATION(IATA DGR, 63rd edition)

UN Number: 3171

Proper Shipping Name: Battery-powered vehicle or battery-powered equipment

Hazard classes: 9

Packaging group: Not applicable(n/a)

EQ: E0

Special provision: A21, A67, A87, A94, A164, A214

Packing instruction (cargo aircraft): 952 Packing instruction (passenger aircraft): 952

ERG code: 9L



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Method	Technical Guidelines	Packing Instruction and Special
Air	2021-2022 Edition of the ICAO Technical	Packing Instruction 952
	Instruction for the Safe Transport of	Limit per package:
	Dangerous Goods by Air (Technical	No limit(passenger and cargo).
	Instructions) and the 63rd Edition of the	
	IATA Dangerous Goods Regulations (IATA	
Sea	IMDG Code (40-20)	Special Provision: 240, 961, 962, 971
		240, 001, 002, 071

#### **SECTION 15. REGULATORY INFORMATION**

**SARA 302** : Health hazard.

SARA 311/312 Hazards : Not regulated.

SARA 313 Component(s) : Cobalt compounds are considered hazardous and are

> subjected to reporting requirements of section 313 title III of the superfund amendments and reauthorization act of 1986

(SARA) and 40 CFR part 372.

California Prop 65 : This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other

reproductive harm.

### **SECTION 16. OTHER INFORMATION**

### **Further information**

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#### Disclaimer:

This SDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by us to be dependable and is accurate to the best of our knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. We assumed no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.

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\*\*End of Material Safety Data Sheet\*\*\*