

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

1.1. Product identifier

Product form	: Article
Product name	: Doorbell Li-ion battery
Product code	: WIFICDP30WT
Type of product	: SP-188 Lithium cells and batteries are not subject to provision of ADR because lithium metal is less than 2 gram.

1.2. Relevant identified uses of the substance 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
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1.3. Details of the supplier of the safety data 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 mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Contains	: Cobalt lithium dioxide, Phosphate(1),hexafluoro-,Lithium, nickel
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2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Cobalt lithium dioxide	CAS-No.: 12190-79-3 EC-No.: 235-362-0	15 – 40	Repr. 1A, H360
Graphite	CAS-No.: 7782-42-5	10 – 30	Not classified
Phosphate(1),hexafluoro-,Lithium	CAS-No.: 21324-40-3	10 – 30	Acute Tox. 3 (Oral), H301 Skin Corr. 1, H314 STOT RE 1, H372
copper	CAS-No.: 7440-50-8	7 – 13	Aquatic Chronic 2, H411
aluminium	CAS-No.: 7429-90-5 EC-No.: 231-072-3 EC Index-No.: 013-002-00-1	5 – 10	Water-react. 2, H261 Flam. Sol. 1, H228
nickel	CAS-No.: 7440-02-0 EC-No.: 231-111-4 EC Index-No.: 028-002-00-7	1 – 5	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Chronic 3, H412

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.

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.
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5.2. Special hazards arising from the substance or mixture

Fire hazard	: Flammable solid.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

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.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking.

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 and cleaning up

Methods for cleaning up : Mechanically recover the product.
Other information : 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 storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.
Storage temperature : < 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

copper (7440-50-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Copper
Remark	(Year of adoption 2014)
Regulatory reference	SCOEL Recommendations
Netherlands - Occupational Exposure Limits	
Local name	Koper
TGG-8u (OEL TWA)	0,1 mg/m ³ en anorganische koperverbindingen (inhaleerbaar)
Regulatory reference	Arbeidsomstandighedenregeling 2022
nickel (7440-02-0)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Nickel metal

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nickel (7440-02-0)	
Remark	(Year of adoption 2011)
Regulatory reference	SCOEL Recommendations
EU - Biological Limit Value (BLV)	
Local name	Nickel and nickel compounds
Regulatory reference	SCOEL List of recommended health-based BLVs and BGVs

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

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 inadequate ventilation] wear respiratory protection.

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	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available

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Flammability (solid, gas)	: Flammable solid, In contact with water releases flammable gases.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. In contact with water releases flammable gases.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Water, humidity.

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.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Cobalt lithium dioxide (12190-79-3)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

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

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Phosphate(1),hexafluoro-,Lithium (21324-40-3)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
nickel (7440-02-0)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Doorbell Li-ion battery	
Viscosity, kinematic	Not applicable

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term : Not classified
(acute)
Hazardous to the aquatic environment, long-term : Not classified
(chronic)
Not rapidly degradable

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. 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






In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3481	UN 3481	UN 3481	UN 3481	UN 3481
14.2. UN proper shipping name				
LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT	Lithium ion batteries contained in equipment	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT

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ADR	IMDG	IATA	ADN	RID
Transport document description				
UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9A, (E)	UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9	UN 3481 Lithium ion batteries contained in equipment, 9A	UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9A	UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9A
14.3. Transport hazard class(es)				
9A	9	9A	9A	9A
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M4
Special provisions (ADR)	: 188, 230, 310, 348, 360, 376, 377, 387, 670
Limited quantities (ADR)	: 0
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906
Transport category (ADR)	: 2
Tunnel restriction code (ADR)	: E
EAC code	: 4W

Transport by sea

Special provisions (IMDG)	: 188, 230, 310, 348, 360, 376, 377, 384, 387
Limited quantities (IMDG)	: 0
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-I
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW19
Properties and observations (IMDG)	: Electrical batteries containing lithium ion encased in a rigid metallic body. Lithium ion batteries may also be shipped in, or packed with, equipment. Electrical lithium batteries may cause fire due to an explosive rupture of the body caused by improper construction or reaction with contaminants.

Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: 967
PCA max net quantity (IATA)	: 5kg
CAO packing instructions (IATA)	: 967
CAO max net quantity (IATA)	: 35kg
Special provisions (IATA)	: A48, A88, A99, A154, A164, A181, A185, A206, A213, A220
ERG code (IATA)	: 12FZ

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Inland waterway transport

Classification code (ADN)	: M4
Special provisions (ADN)	: 188, 230, 310, 348, 360, 376, 377, 387, 670
Limited quantities (ADN)	: 0
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

Rail transport

Classification code (RID)	: M4
Special provisions (RID)	: 188, 230, 310, 348, 360, _376, 377, 387, 670
Limited quantities (RID)	: 0
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P903, 908, 909, P910, P911, LP903, LP904, LP905, LP906
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE2
Hazard identification number (RID)	: 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

Contains no substance on the REACH candidate list

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 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

France	
Occupational diseases	
Code	Description
RG 25	Diseases resulting from the inhalation of mineral dust containing crystalline silica (quartz, cristobalite, tridymite), crystalline silicates (kaolin, talc), graphite or coal.

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 3, Highly hazardous to water (Classification according to AwSV, Annex 1)
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
Storage class (LGK, TRGS 510)	: LGK 11 - Combustible solids

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Joint storage table	:	<table><tr><td>LGK 1</td><td>LGK 2A</td><td>LGK 2B</td><td>LGK 3</td><td>LGK 4.1A</td></tr><tr><td>LGK 4.1B</td><td>LGK 4.2</td><td>LGK 4.3</td><td>LGK 5.1A</td><td>LGK 5.1B</td></tr><tr><td>LGK 5.1C</td><td>LGK 5.2</td><td>LGK 6.1A</td><td>LGK 6.1B</td><td>LGK 6.1C</td></tr><tr><td>LGK 6.1D</td><td>LGK 6.2</td><td>LGK 7</td><td>LGK 8A</td><td>LGK 8B</td></tr><tr><td>LGK 10</td><td>LGK 11</td><td>LGK 12</td><td>LGK 13</td><td>LGK 10-13</td></tr></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
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 5.1A, LGK 6.2, LGK 7																									
Joint storage with restrictions permitted for	:	LGK 2A, LGK 3, LGK 4.1A, LGK 4.2, LGK 4.3, LGK 5.1B, LGK 5.1C, LGK 5.2, LGK 6.1A, LGK 6.1B																									
Joint storage permitted for	:	LGK 2B, LGK 4.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12, LGK 13, LGK 10-13																									
Netherlands																											
ABM category	:	Z(1) - non biodegradable substances with hazardous properties for humans and the environment (carcinogenicity/ mutagenicity/ reprotoxicity/bioaccumulative potential/ toxicity or persistence)																									
SZW-lijst van kankerverwekkende stoffen	:	None of the components are listed																									
SZW-lijst van mutagene stoffen	:	None of the components are listed																									
SZW-lijst van reprotoxische stoffen – Borstvoeding	:	None of the components are listed																									
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	:	None of the components are listed																									
SZW-lijst van reprotoxische stoffen – Ontwikkeling	:	None of the components are listed																									
Denmark																											
Danish National Regulations	:	Pregnant/breastfeeding women working with the product must not be in direct contact with the product The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal																									
Switzerland																											
Storage class (LK)	:	LK 11/13 - Solids																									

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	Acute 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
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods

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Abbreviations and acronyms:

LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
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
PBT	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. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Carc. 2	Carcinogenicity, Category 2
Flam. Sol. 1	Flammable solids, Category 1
H228	Flammable solid.
H261	In contact with water releases flammable gases.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Repr. 1A	Reproductive toxicity, Category 1A
Skin Corr. 1	Skin corrosion/irritation, Category 1

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Full text of H- and EUH-statements:

Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, 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.