

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

1.1 Product identifier

Cordless Polisher (BGS 9259) / Replacement Battery (BGS 9259-1)
Article number: 9259, 9259-1

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

1.2.1 Relevant uses

accumulator
Battery

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company BGS technic KG
Bandwikerstr. 3
42929 Wermelskirchen / GERMANY
Phone +49 (0)2196 72048-0
Fax +49 (0)2196 72048-20
Homepage www.bgstechnic.com
E-mail mail@bgs-technic.de

Address enquiries to

Technical information mail@bgs-technic.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Skin Corr. 1: H314 Causes severe skin burns and eye damage.
Eye Dam. 1: H318 Causes serious eye damage.
Flam. Liq. 2: H225 Highly flammable liquid and vapour.
Repr. 1A: H360FD May damage fertility. May damage the unborn child.
STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure.

2.2 Label elements

This product is an article and therefore it does not require labelling according to EC directives [REACH/CLP].

2.3 Other hazards

Physico-chemical hazards When cell is exposed to an external short-circuit, it will cause heat generation and ignition. The chemicals are contained within a sealed housing. There is only a risk of exposure if the battery is subject to mechanical or electrical misuse. At temperatures over 70 °C risk of bursting and withdrawal of electrolyte liquid exists.

Human health dangers The contained dangerous materials are not freely available with foreseeable use.

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

The product is an article.

| Range [%] | Substance |
|-----------|--|
| 5 - 20 | Ethylene carbonate |
| | CAS: 96-49-1, EINECS/ELINCS: 202-510-0 |
| | GHS/CLP: Eye Irrit. 2: H319 - Acute Tox. 4: H302 - STOT RE 2: H373 |
| 5 - 20 | Propylene carbonate |
| | CAS: 108-32-7, EINECS/ELINCS: 203-572-1, EU-INDEX: 607-194-00-1 |
| | GHS/CLP: Eye Irrit. 2: H319 |
| 5 - 20 | Diethyl carbonate |
| | CAS: 105-58-8, EINECS/ELINCS: 203-311-1 |
| | GHS/CLP: Flam. Liq. 3: H226 |
| 5 - 20 | Ethylpropionat |
| | CAS: 105-37-3, EINECS/ELINCS: 203-291-4, EU-INDEX: 607-028-00-8 |
| | GHS/CLP: Flam. Liq. 2: H225 |
| 20 - 50 | Cobaltlithiumdioxide |
| | CAS: 12190-79-3, EINECS/ELINCS: 235-362-0 |
| | GHS/CLP: Repr. 1B: H360FD |
| 0.05 - 5 | Lithium hexafluorophosphate |
| | CAS: 21324-40-3, EINECS/ELINCS: 244-334-7 |
| | GHS/CLP: Acute Tox. 3: H301 - Skin Corr. 1A: H314 - Eye Dam. 1: H318 - STOT RE 1: H372 |

Comment on component parts

The structural design of the cells prevents release of the hazardous media contained therein when the unit is used for its intended purpose.
Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Measures are only valid for damaged cells.

Inhalation

Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.

Skin contact

In case of contact with skin wash off immediately with soap and water.
Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Consult a doctor immediately.

Ingestion

Consult a doctor immediately.
Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Product is caustic.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide.
Metal fire-ex powder.
Dry powder.

Extinguishing media that must not be used

Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Bursting batteries can be forcibly projected from a fire.
Hydrogen fluoride (HF).

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.
Cool containers at risk with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Not required under normal conditions.

6.2 Environmental precautions

Do not discharge leakages into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. acid binder).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

The data of the manufacturer concerning the loading and unloading parameters and the recommended temperature ranges are to be considered.

7.2 Conditions for safe storage, including any incompatibilities

Prevent penetration into the ground.
Do not store together with food and animal food/diet.
Do not store with combustible materials.
Store in a dry place.
Protect from heat/overheating.
Protect from sun.
Ensure battery terminals are protected during storage.
Protect from atmospheric moisture, water and contamination.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

| |
|---|
| Substance |
| Lithium hexafluorophosphate |
| CAS: 21324-40-3, EINECS/ELINCS: 244-334-7 |
| Long-term exposure: 2,5 mg/m ³ , Fluoride (inorganic as F) |
| Nickel powder |
| CAS: 7440-02-0, EINECS/ELINCS: 231-111-4, EU-INDEX: 028-002-01-4 |
| Long-term exposure: 0,5 mg/m ³ , Sk, Carc |

Ingredients with occupational exposure limits to be monitored (EU)

| |
|---|
| Substance / EC LIMIT VALUES |
| Lithium hexafluorophosphate |
| CAS: 21324-40-3, EINECS/ELINCS: 244-334-7 |
| Eight hours: 2,5 mg/m ³ , F |

8.2 Exposure controls

| | |
|--|---|
| Additional advice on system design | Measures apply only to the damaged product. Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances. |
| Eye protection | safety glasses (EN 166:2001) |
| Hand protection | 0,7 mm Butyl rubber, >480 min (EN 374-1/-2/-3). |
| Skin protection | Protective clothing (EN 340) |
| Other | Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact during pregnancy/ while nursing. |
| Respiratory protection | Not required under normal conditions. |
| Thermal hazards | none |
| Delimitation and monitoring of the environmental exposition | Protect the environment by applying appropriate control measures to prevent or limit emissions. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---|--|
| Form | Battery BGS 9259: 3.6 V; 2000 mAh; 7.2 Wh BGS 9259-1: 10.8 V; 1300 mAh |
| Color | various |
| Odor | odourless |
| Odour threshold | not applicable |
| pH-value | not applicable |
| pH-value [1%] | not applicable |
| Boiling point [°C] | not applicable |
| Flash point [°C] | not applicable |
| Flammability (solid, gas) [°C] | not applicable |
| Lower explosion limit | not applicable |
| Upper explosion limit | not applicable |
| Oxidising properties | no |
| Vapour pressure/gas pressure [kPa] | not applicable |
| Density [g/ml] | not determined |
| Bulk density [kg/m ³] | not applicable |
| Solubility in water | not applicable |
| Partition coefficient [n-octanol/water] | not applicable |
| Viscosity | not applicable |
| Relative vapour density determined in air | not applicable |
| Evaporation speed | not applicable |
| Melting point [°C] | not determined |
| Autoignition temperature [°C] | not determined |
| Decomposition temperature [°C] | not determined |

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

When cell is exposed to an external short-circuit, it will cause heat generation and ignition. Heating leads to a risk of bursting and of electrolyte fluid escaping. Avoid mechanical and electrical misuse.

10.4 Conditions to avoid

Heat causes increase in pressure and risk of bursting.

10.5 Incompatible materials

Water

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| |
|--|
| Substance |
| Diethyl carbonate, CAS: 105-58-8 |
| LD50, oral, Rat: > 4900 mg/kg bw. |
| Lithium hexafluorophosphate, CAS: 21324-40-3 |
| LD50, oral, Rat: > 50 - 300 mg/kg (Lit.). |
| Ethylene carbonate, CAS: 96-49-1 |
| LD50, dermal, Rabbit: > 3000 mg/kg (Lit.). |
| LD50, oral, Rat: 10000 mg/kg (Lit.). |
| Propylene carbonate, CAS: 108-32-7 |
| LD50, dermal, Rabbit: > 2000 mg/kg. |
| LD50, oral, Rat: > 5000 mg/kg. |

| | |
|---|---|
| Serious eye damage/irritation | Based on the available information, the classification criteria are fulfilled. Risk of serious damage to eyes. Calculation method |
| Skin corrosion/irritation | Based on the available information, the classification criteria are fulfilled. Strongly corrosive. Calculation method |
| Respiratory or skin sensitisation | Based on the available information, the classification criteria are fulfilled. Sensitizing. Calculation method |
| Specific target organ toxicity — single exposure | Based on the available information, the classification criteria are not fulfilled. |
| Specific target organ toxicity — repeated exposure | Causes damage to organs through prolonged or repeated exposure. Based on the available information, the classification criteria are fulfilled. Calculation method |
| Mutagenicity | Based on the available information, the classification criteria are not fulfilled. |
| Reproduction toxicity | Based on the available information, the classification criteria are fulfilled. Suspected of damaging fertility. Calculation method |
| Carcinogenicity | Based on the available information, the classification criteria are not fulfilled. |
| Aspiration hazard | Based on the available information, the classification criteria are not fulfilled. |
| General remarks | none |

SECTION 12: Ecological information

12.1 Toxicity

| |
|--|
| Substance |
| Diethyl carbonate, CAS: 105-58-8 |
| LC50, (48h), <i>Leuciscus idus</i> : > 500 mg/l. |
| Lithium hexafluorophosphate, CAS: 21324-40-3 |
| EC50, (3h), Activated sludge: > 1000 mg/l (Lit.). |
| EC50, (72h), <i>Pseudokirchneriella subcapitata</i> : > 100 mg/l (Lit.). |
| EC50, (48h), <i>Daphnia magna</i> : > 100 mg/l (Lit.). |
| Propylene carbonate, CAS: 108-32-7 |
| LC50, (96h), <i>Cyprinus carpio</i> : > 1000 mg/l. |
| EC50, (72h), Algae: > 900 mg/l. |
| EC50, (48h), <i>Daphnia magna</i> : > 1000 mg/l. |

12.2 Persistence and degradability

| | |
|--|---------------------------|
| Behaviour in environment compartments | No information available. |
| Behaviour in sewage plant | No information available. |
| Biological degradability | not determined |

12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material c It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

For recycling, consult manufacturer.

Waste no. (recommended)

200134

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended)

150102

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID 3480

Inland navigation (ADN) 3480

Marine transport in accordance with IMDG 3480

Air transport in accordance with IATA 3480

14.2 UN proper shipping name

Transport by land according to ADR/RID Lithium ion batteries (No dangerous goods, according ADR special regulations 188)

- Classification Code M4

- ADR LQ 0 kg

- ADR 1.1.3.6 (8.6) Transport category (tunnel restriction code) 2 (E)

Inland navigation (ADN) Lithium ion batteries (No dangerous goods, according ADR special regulations 188)

- Classification Code M4

Marine transport in accordance with IMDG Lithium ion batteries (No dangerous goods, according IMDG Special regulations 188)

- EMS F-A, S-I

- IMDG LQ 0 I

Air transport in accordance with IATA Lithium ion batteries

- Label



14.3 Transport hazard class(es)

Transport by land according to ADR/RID 9

Inland navigation (ADN) 9

Marine transport in accordance with IMDG 9

Air transport in accordance with IATA 9

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

EEC-REGULATIONS 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- Observe employment restrictions for people none

- VOC (2010/75/CE) not applicable

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 03)

H372 Causes damage to organs through prolonged or repeated exposure.

H318 Causes serious eye damage.

H314 Causes severe skin burns and eye damage.

H301 Toxic if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H226 Flammable liquid and vapour.

H225 Highly flammable liquid and vapour.

H360FD May damage fertility. May damage the unborn child.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform Chemical Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV@/TWA = Threshold limit value – time-weighted average
TLV@STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Skin Corr. 1: H314 Causes severe skin burns and eye damage. (Calculation method)
Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)
Flam. Liq. 2: H225 Highly flammable liquid and vapour. (Calculation method)
Repr. 1A: H360FD May damage fertility. May damage the unborn child. (Calculation method)
STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure. (Calculation method)

Modified position

none

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