



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

1.1. Product identifier

Name of product Inspektionsleuchte, Set 3-in-1, LED, Wiederaufladbar

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

Identified uses

Sector of uses [SU]

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Recommended intended purpose(s)

Lithium-Ion Battery

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor

joke Technology GmbH
Asselborner Weg 14-16, D-51429 Bergisch Gladbach
Phone +49 (0) 22 04 – 8 39 - 0, Fax +49 (0) 22 04 – 8 39 - 60
E-Mail info@joke.de
Internet www.joke.de

Advice

Phone +49 (0) 22 04 / 8 39-0
Fax +49 (0) 22 04 / 8 39-60
E-mail (competent person):
safety-data-sheet@joke.de

1.4. Emergency telephone number

Emergency advice

Vergiftungs-Informations-Zentrale Freiburg
Phone +49 (0) 761 / 1 92 40

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Flam. Liq. 2	H225	
Flam. Sol. 1	H228	
Water-react. 2	H261	
Aquatic Chronic 2	H411	

Hazard statements for physical hazards

H225 Highly flammable liquid and vapour.
H228 Flammable solid.
H261 In contact with water releases flammable gases.

Hazard statements for environmental hazards

H411 Toxic to aquatic life with long lasting effects.

2.2. Label elements

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



GHS02



GHS09

Signal word
Danger

Hazard statements for physical hazards

H225 Highly flammable liquid and vapour.
H228 Flammable solid.
H261 In contact with water releases flammable gases.

Hazard statements for environmental hazards

H411 Toxic to aquatic life with long lasting effects.

2.3. Other hazards

No information available.

SECTION 3: Composition/ information on ingredients

3.2. Mixtures

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
7440-44-0		Carbon (proprietary)	0,1 - 1	
7440-50-8		Copper Foil	5 - 15	Aquatic Chronic 2, H411
21324-40-3		Lithium-Hexa-Fluoro, Phosphat (LiPF6)	1 - 5	
24937-79-9		Polyvinylidene Fluoride (PVDF) Fluorid (PVDF)	0,5 - 2	
7782-42-5		Graphite Powder	10 - 30	
12057-17-9	601-724-5	Lithium manganese oxide (LiMn2O4) Lithium manganese oxide	13 - 17	
105-58-8	203-311-1	Diethyl carbonate	1 - 10	
96-49-1	202-510-0	Ethylene carbonate	1 - 10	
9003-07-0	618-352-4	Polypropylene	0,5 - 1	
9002-88-4	926-220-5	Polyethylene	0,5 - 1	
7429-90-5	231-072-3	Aluminium	10 - 20	Flam. Sol. 1, H228 / Water-react. 2, H261
616-38-6	210-478-4	Dimethyl carbonate Dimethyl carbonate	1 - 10	Flam. Liq.2, H225

not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of inhalation

Remove the casualty into fresh air and keep him immobile.

In case of skin contact

In case of contact with skin wash off immediately with plenty of water.

Take off contaminated clothing.

Seek medical advice immediately.



In case of eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

In case of ingestion

Do not induce vomiting.

If swallowed by mistake drink plenty of water and seek medical treatment.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam

ABC powder

Carbon dioxide

sand

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

In fires, hazardous combustion gases are formed:

Carbon monoxide (CO)

The use of water-based fire extinguishing agents can release hydrogen, which can lead to fire or explosion recovery.

Carbon dioxide (CO₂)

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Wear full protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Disposal according to regulations.

Take up residues with absorbent material (e.g. sand).

After taking up the material dispose according to regulation.

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8



SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Pinch, puncture, avoid short (+) and (-) battery terminals with conductive (e.g., metal) terminals.
Take the usual precautions when handling with chemicals.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in closed original container.

Advice on storage compatibility

Keep at distance to ignition device, water and alkalies.

Further information on storage conditions

Keep container dry, tightly closed and store at cool and aired place.
Recommended storage temperature: 20°C.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

biological limits (TRGS 903)

CAS No	Name	Parameter	BGW	Examination material	Test date
7429-90-5	Aluminium	Aluminium	50 µg/g Kreatinin	U	C

8.2. Exposure controls

Respiratory protection

Environment-independent breathing apparatus.

Hand protection

Gloves (acid-resistant)

Eye protection

Face shield

Other protection measures

Acid-resistant protective clothing

Appropriate engineering controls

ventilation system

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

similar to plastic

Colour

blue

Odour

not determined

Odour threshold



not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
Boiling temperature / boiling range	not determined				
Melting point / Freezing point	not determined				
Flash point	not determined				
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	not determined				
Self ignition temperature	not determined				
Lower explosion limit	not determined				
Upper explosion limit	not determined				
Vapour pressure	not determined				
Relative density	not determined				
Vapour density	not determined				
Solubility in water	not determined				
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				
Decomposition temperature	not determined				
Viscosity No data available	not determined				

Oxidising properties
 No information available.

Explosive properties
 No information available.



9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable at ambient temperature.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

metal oxides

Oxidising agent, strong

Carbon monoxide and carbon dioxide.

Hazardous decomposition products:

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No information available.

SECTION 12: Ecological information

12.1. Toxicity

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Do not allow product to enter the environment and sewage system in an uncontrolled manner.

General regulation

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.



SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recommendations for the product

Remove in accordance with local official regulations.

Recommendations for packaging

Dispose of according to official regulations.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	UN3481	UN3481	UN3481
14.2. UN proper shipping name	LITHIUM-IONEN-BATTERIEN IN AUSRÜSTUNGEN	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT
14.3. Transport hazard class(es)	9	9	9
14.4. Packing group	-	-	-
14.5. Environmental hazards	No	No	No
14.6. Special precautions for user	No information available.		
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available.		

SECTION 15: Regulatory information

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

No information available.

15.2. Chemical Safety Assessment

No data available

SECTION 16: Other information

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

Further information

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Sources of key data used

Datasheets of the manufacturer

H225 Highly flammable liquid and vapour.

Safety Data Sheet according to Regulation (EC)

No. 1907/2006 (REACH)

Revision 01.08.2022 (GB) Version 0.0

Inspektionsleuchte, Set 3-in-1, LED,

Wiederaufladbar



H228	Flammable solid.
H261	In contact with water releases flammable gases.
H411	Toxic to aquatic life with long lasting effects.