





Safety Data Sheet

According to Regulation EC No.1907/2006 Annex 2

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

1.1 Product Identifier

Product Name Sonis® Comms Lithium Ion Battery Pack

Product Code AEB081-100-000

Product Description Lithium Ion Battery

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

Only to be used as a battery to power JSP Ltd's Sonis® Comms range of products. No other uses

for this battery are recommended.

1.3 Details of the supplier

Address: JSP Ltd

Worsham Mill Minster Lovell

Witney Oxfordshire OX29 0TA

Telephone: +44 1993 826051

Email Address: technical.support@jsp.co.uk

1.4 Emergency Telephone Number

Emergency Phone # +44 1993 826051

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

Article containing substances not intended to be released, this product is a sealed unit and not considered hazardous under recommended usage and storage.

2.2 Label Elements

Labelling according to regulation EC No.1272/2008

Hazard Pictogram



Signal Word

Danger

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Hazard Statements

H228

H317

H350

Flammable Solid

May cause an allergic skin reaction

May cause cancer

Precautionary Statements

Please refer to section 16 for a full list of precautionary statements

2.3 Other Hazards

This product does not fulfil the criteria outlined in Annex XIII of regulation EC No. 1906:2006 for being persistent, bioaccumulative and toxic (PBT) and very persistent and very bioaccumulative (vPvB)

SECTION 3 Composition/information on ingredients

3.1 **Substances**

3.2 **Mixtures**

	CAS Number	%	Classification:	Туре
Substance			Regulation EC No. 1272/2008	
Lithium- transition metal oxide (Li[M] _m [O] _n)* cathode	12190-79-3 12057-17-9 18242-95-1	20-60	Skin Sens. 1 H317 Carc. 1B H350	[1]
Carbon anode	7782-42-5 7440-44-0	10-30	Not considered Hazardous under Regulation EC No. 1272/2008	
Aluminium (Outer case)	7429-90-5	1~30	Flam. Sol. 1; H228	[1]
Organic electrolyte	-	5-25	-	
Copper	7440-50-8	1-15	Not considered Hazardous under Regulation EC No. 1272/2008	
Aluminium	7429-90-5	1-10	Flam. Sol. 1; H228	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type:

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

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[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

*M represents are transition metals of Co, Mn, Ni and Al

SECTION 4 First Aid Measures

4.1 Description of First Aid Measures

Eye contact In case of electrolyte contact with eyes do not rub eyes. Immediately flush

eyes with water continuously for at least 15 minutes. Seek medical advice.

In case of inhalation electrolyte vapours make victim blow their nose. Seek

medical attention if symptoms persist

Skin contact Remove contaminated clothes and shoes immediately. Wash extraneous

matter or contact region with soap and water

Ingestion Wash mouth thoroughly with water and seek medical attention

Protection of first- Please see section 8.2 for appropriate personal protective equipment for

use by first aiders

4.2 Most Important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact Electrolyte may cause eye irritation and

inflammation

Inhalation Electrolyte may cause respiratory irritation and

inflammation

Skin contact Electrolyte may cause irritation to skin and

inflammation

Ingestion Electrolyte may be toxic if ingested

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician No specific treatment notes to physician

Specific treatments

SECTION 5 Firefighting measures

5.1 Extinguishing Media

Suitable Carbon Dioxide, Nitrogen, chemical fire extinguishing media

Extinguishing

Media

aiders

Unsuitable Water

Extinguishing

Media

5.2 Special hazard arising from the substance or mixture

Oxides of Lithium, Cobalt, Manganese, Nickel, Aluminium and Copper maybe released during combustion. Corrosive gases may be liberated during combustion and with contact with water.

5.3 Advice for firefighters

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SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

personnel

For non-emergency Wear suitable personal protective equipment as outlined in section 8 when dealing with spilled substances and mixtures from the battery. Remove any

ignition sources and avoid contact with water

For emergency responders

Wear suitable personal protective equipment as outlined in section 8 when dealing with spilled substances and mixtures from the battery. Remove any

ignition sources and avoid contact with water

6.2 **Environmental precautions**

Do not dispose of spilled material in the environment, only dispose of material in accordance with local legislation

6.3 Methods and materials for containment and cleaning up

Remove solid waste from hazard area, for any spilled electrolyte wipe with a dry cloth using personal protective equipment recommended in section 8.

Reference to other sections 6.4

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7 Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures Do not crush, pierce, short the positive and negative

terminals with conductive material (i.e. metal). Do not directly weld the terminals. Do not disassemble,

mutilate or mechanically abuse the battery.

Advice on general occupational hygiene Ensure appropriate workplace hygiene is exercised while handling the battery do eat, drink or smoke while handling the battery, especially if it is suspected to be

leaking

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool location, well ventilated location away from moisture, open flames and sources of heat.

Specific end use(s) 7.3

Recommendations

Industrial sector specific solutions Only to be used as a battery to power JSP Ltd's Sonis®

Comms range of products. No other uses for this

battery are recommended.

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SECTION 8 Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control Parameters

Occupational Exposure limits

This product does not have an occupational exposure limit

Recommended monitoring procedures DNELs/DMELs PNECs

8.2 Exposure Controls

Appropriate Under foreseeable use of the product engineering controls are not required. In the presence of open or leaking batteries ensure adequate ventilation is provided

Individual protective measures

Hygiene measures

Eye/face protection Where risk assessment shows that eye protection is appropriate use

suitable eye and face protection that meets the requirements of EN166

Skin Protection

Hand When handling a battery that is leaking wear suitable gloves that meets the

protection requirements of EN 374

Body When handling a battery that is leaking wear suitable clothing that minimise exposed skin to the hazard

Other skin protection

exposure

controls

Environmental Avoid discharging electrolyte solution into the environment, dispose of

damaged battery in accordance with local legislation

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State Solid Cell containing fluid electrolyte

Colour Black Odour Non

Odour threshold Not Available PH Not Available Melting Not Available

point/freezing point

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Initial boiling point Not Available

and boiling range

Flash point Not Available Evaporation rate Not Available Flammability Not Available Upper/lower Not Available

flammability

/explosive limits

Vapour pressure Not Available Vapour density Not Available Relative density Not Available Solubility(ies) Not Available Partition coefficient: Not Available

n-octanol/water

Auto-ignition Not Available

temperature

Decomposition Not Available

temperature

Viscosity

Explosive Not Available

properties

Oxidising Not Available

properties

9.2 Other information

3.7V Battery Voltage

Battery Capacity 200mAh

Battery Weight 76.4g

SECTION 10 Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product

10.2 **Chemical Stability**

Under foreseeable use of the product this battery is considered chemically stable

10.3 Possibility of hazardous reactions

Under foreseeable use of the product hazardous reactions should not occur

10.4 **Conditions to Avoid**

Avoid excessive heat, humidity and mechanical stresses. Avoid contact with water and avoid short circuiting the terminals

10.5 Hazardous decomposition products

Corrosive gases may be liberated during combustion

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11.1 Information on toxicological effects

Acute toxicity

Product/Ingredient Name	Exposure Route	Species	Exposure Time	Dose
Organic Electrolyte	Oral	Rat		>2000mg/kg

Skin corrosion/irritation

No Data Available

Serious eye damage/irritation

No Data Available

Respiratory or skin sensitisation

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

No Data Available

Additional Information

No addition information

SECTION 12 Ecological Information

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12.1 **Toxicity**

No Data Available

12.2 Persistence and degradability

Does not readily decay under foreseeable environmental conditions

12.3 Bioaccumulative potential

No Data Available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No Data Available

12.6 Other adverse effects

No data available

SECTION 13 Disposal Considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 **Waste Treatment Methods**

Product

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Packaging

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14 Transport Information

14.1 **UN** number

ADR/RID

ADN

3480 (3481 when battery is contained in equipment or packed with equipment) 3480 (3481 when battery is contained in equipment or packed with equipment)

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IMDG 3480 (3481 when battery is contained in

equipment or packed with equipment)

3480 (3481 when battery is contained in **ICAO**

equipment or packed with equipment)

14.2 **UN** proper shipping name

> Lithium Ion Batteries (Lithium ion batteries ADR/RID

contained in equipment or Lithium ion

batteries packed with equipment)

Lithium Ion Batteries (Lithium ion batteries **ADN**

contained in equipment or Lithium ion

batteries packed with equipment)

Lithium Ion Batteries (Lithium ion batteries **IMDG**

contained in equipment or Lithium ion

batteries packed with equipment)

Lithium Ion Batteries (Lithium ion batteries **ICAO**

contained in equipment or Lithium ion

batteries packed with equipment)

14.3 **Transport hazard classes**

> ADR/RID 9 ADN 9 9 **IMDG ICAO** 9

14.4 Packaging group

> ADR/RID Ш **ADN** Ш **IMDG** Ш **ICAO** Ш

14.5 **Environmental hazards**

> ADR/RID N/A ADN N/A **IMDG** N/A **ICAO** N/A

14.6 Special precaution for user

> Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not Applicable

SECTION 15 Regulatory information

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

Regulation EC No.1907/2006 on the registration evaluation authorisation and restriction of chemicals REACH:

Annex XIV None of the substances in this mixture are listed

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Annex XVII None of the substances in this mixture

are listed

Candidate List of Substance of Very High concern None of the substances in this mixture

for eventual inclusion into Annex XIV are listed

International regulations:

Chemical Weapon Convention List Schedules I, II & Not Listed

III Chemicals

Montreal Protocol (Annexes A, B, C, E) Not Listed Stockholm Convention on Persistent Organic Not Listed

Pollutants

Rotterdam Convention on Prior Inform Consent Not Listed

(PIC)

UNECE Aarhus Protocol on POPs and Heavy Not Listed

Metals

15.2 **Chemical Safety Assessment**

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16 Other information

Full Text of H-Statements referred to in Section 2 and 3

H228 Flammable Solid

H317 May cause an allergic skin reaction

H350 May cause cancer

Full Text of P-Statements referred to in Section 2

P210 Keep away from heat/sparks/open flames/hot

surfaces

P240 Ground/bond container and receiving equipment P241 Use electrical

explosion-proof

ventilating/lighting/equipment

P280 Wear protective gloves/protective/clothing/eye

protection/face protection

P370 + P378 In case of fire use ... for extinction Avoid Breathing gases/vapours P261

Contaminated work clothing should not be P272

allowed out of the work place

IF ON SKIN: Wash with plenty of soap and water P302 + P352 P333 + P313 If skin irritation or rash occurs: get medical

advice/attention

P363 Wash contaminated clothing before reuse P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have

been read and understood

P281 Use personal protective equipment as required IF exposed or concerned get medical advice or P308 + P313

attention

P405 Store locked up

Dispose of contents/container in a accordance P501

with local legislation and guidelines

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Notice to reader

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