



Safety Data Sheet

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This product is defined as an article under REACH and does not require a Safety Data Sheet under Article 31 of Regulation (EC) No. 1907/2006. Since an SDS is not required, this document does not contain all of the information that is required for substance and mixture SDSs under REACH.

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

TR-630 Standard Battery

Product Identification Numbers

52-0000-5354-7

7000144501

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

Identified uses

Battery

1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
Telephone: +44 (0)1344 858 000
E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

This material is exempt from hazard classification according to Regulation (EC) No. 1272/2008, as amended, on classification, labelling, and packaging of substances and mixtures.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

Not applicable

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Acrylonitrile-Butadiene -Styrene Copolymers	None	45 - 65	Substance not classified as hazardous
cobalt lithium oxide	(CAS-No.) 12190-79-3 (EC-No.) 235-362-0	30 - 40	Substance not classified as hazardous
Ethylene Carbonate	(CAS-No.) 96-49-1 (EC-No.) 202-510-0	1 - 5	Eye Irrit. 2, H319
lithium hexafluorophosphate(1-)	(CAS-No.) 21324-40-3 (EC-No.) 244-334-7	1 - 5	Substance with a Union workplace exposure limit
Diethyl carbonate	(CAS-No.) 105-58-8 (EC-No.) 203-311-1	1 - 5	Substance not classified as hazardous
dimethyl carbonate	(CAS-No.) 616-38-6 (EC-No.) 210-478-4	1 - 5	Flam. Liq. 2, H225
propylene carbonate	(CAS-No.) 108-32-7 (EC-No.) 203-572-1	0.1 - 1	Eye Irrit. 2, H319

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

No need for first aid is anticipated.

Skin contact

No need for first aid is anticipated.

Eye contact

No need for first aid is anticipated.

If swallowed

No need for first aid is anticipated.

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

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire: Use a carbon dioxide extinguisher to extinguish. Battery may burn without external flame when damaged.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide

Carbon dioxide.

Toxic vapour, gas, particulate.

Condition

During combustion.

During combustion.

During combustion.

5.3. Advice for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Not applicable.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Eye protection not required.

Skin/hand protection

No chemical protective gloves are required.

Respiratory protection

Respiratory protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Specific Physical Form:	Battery
Colour	Black
Odor	Odourless
Odour threshold	<i>Not applicable.</i>
Melting point/freezing point	<i>Not applicable.</i>
Boiling point/boiling range	<i>Not applicable.</i>
Flammability (solid, gas)	Not classified
Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Flash point	No flash point
Autoignition temperature	<i>Not applicable.</i>
Decomposition temperature	<i>Not applicable.</i>
pH	
Kinematic Viscosity	<i>Not applicable.</i>
Water solubility	<i>Not applicable.</i>
Solubility- non-water	<i>Not applicable.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Vapour pressure	<i>Not applicable.</i>
Density	<i>No data available.</i>
Relative density	<i>No data available.</i>

Relative Vapor Density

*Not applicable.***9.2. Other information****9.2.2 Other safety characteristics**

EU Volatile Organic Compounds

No data available.

Evaporation rate

Not applicable.

Percent volatile

*Not applicable.***SECTION 10: Stability and reactivity****10.1 Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable. Stable to 130 °C

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Strong oxidising agents.

Reducing agents.

Strong acids.

Strong bases.

10.6 Hazardous decomposition products**Substance****Condition**

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from internal hazard assessments.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

No health effects are expected.

Skin contact

No health effects are expected.

Eye contact

No health effects are expected.

Ingestion

No health effects are expected.

Additional information:

This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
dimethyl carbonate	Dermal		estimated to be > 5,000 mg/kg
dimethyl carbonate	Inhalation-Dust/Mist		estimated to be > 12.5 mg/l
dimethyl carbonate	Inhalation-Vapour		estimated to be > 50 mg/l
dimethyl carbonate	Ingestion		estimated to be > 5,000 mg/kg
propylene carbonate	Dermal	Rabbit	LD50 > 3,000 mg/kg
propylene carbonate	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
propylene carbonate	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
propylene carbonate	Rabbit	Severe irritant

Skin Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Respiratory Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Germ Cell Mutagenicity

For the component/components, either no data is currently available or the data is not sufficient for classification.

Carcinogenicity

For the component/components, either no data is currently available or the data is not sufficient for classification.

Reproductive Toxicity

Reproductive and/or Developmental Effects

For the component/components, either no data is currently available or the data is not sufficient for classification.

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

For the component/components, either no data is currently available or the data is not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

For the component/components, either no data is currently available or the data is not sufficient for classification.

Aspiration Hazard

For the component/components, either no data is currently available or the data is not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

11.2. Information on other hazards

Not applicable.

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
cobalt lithium oxide	12190-79-3		Data not available or insufficient for classification			N/A
Diethyl carbonate	105-58-8	Activated sludge	Experimental	30 minutes	EC50	>10,000 mg/l
Diethyl carbonate	105-58-8	Green algae	Experimental	72 hours	EC50	>100 mg/l
Diethyl carbonate	105-58-8	Water flea	Experimental	48 hours	EC50	>100 mg/l
Diethyl carbonate	105-58-8	Zebra Fish	Experimental	96 hours	LC50	>100 mg/l
Diethyl carbonate	105-58-8	Green algae	Experimental	72 hours	NOEC	100 mg/l
dimethyl carbonate	616-38-6	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
dimethyl carbonate	616-38-6	Green algae	Experimental	72 hours	EC50	>100 mg/l
dimethyl carbonate	616-38-6	Water flea	Experimental	48 hours	EC50	>100 mg/l
dimethyl carbonate	616-38-6	Zebra Fish	Experimental	96 hours	LC50	>100 mg/l
dimethyl carbonate	616-38-6	Green algae	Experimental	72 hours	NOEC	100 mg/l
dimethyl carbonate	616-38-6	Water flea	Experimental	21 days	NOEC	25 mg/l

TR-630 Standard Battery

Ethylene Carbonate	96-49-1	Activated sludge	Experimental	30 minutes	EC50	>1,000 mg/l
Ethylene Carbonate	96-49-1	Crustacea other	Experimental	48 hours	LC50	5,900 mg/l
Ethylene Carbonate	96-49-1	Green Algae	Experimental	72 hours	EC50	100 mg/l
Ethylene Carbonate	96-49-1	Rainbow trout	Experimental	96 hours	LC50	>100 mg/l
Ethylene Carbonate	96-49-1	Green Algae	Experimental	72 hours	NOEC	100 mg/l
lithium hexafluorophosphate(1-)	21324-40-3	Rainbow trout	Estimated	96 hours	LC50	68 mg/l
lithium hexafluorophosphate(1-)	21324-40-3	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
lithium hexafluorophosphate(1-)	21324-40-3	Green Algae	Experimental	96 hours	EC50	>100 mg/l
lithium hexafluorophosphate(1-)	21324-40-3	Water flea	Experimental	48 hours	EC50	>100 mg/l
lithium hexafluorophosphate(1-)	21324-40-3	Fathead minnow	Estimated	22 days	NOEC	4.4 mg/l
lithium hexafluorophosphate(1-)	21324-40-3	Water flea	Estimated	21 days	NOEC	4.9 mg/l
lithium hexafluorophosphate(1-)	21324-40-3	Green Algae	Experimental	96 hours	NOEC	22 mg/l
propylene carbonate	108-32-7	Activated sludge	Experimental	30 minutes	EC10	>=800 mg/l
propylene carbonate	108-32-7	Bacteria	Experimental	17 hours	EC50	>10,000 mg/l
propylene carbonate	108-32-7	Common Carp	Experimental	96 hours	LC50	>1,000 mg/l
propylene carbonate	108-32-7	Green algae	Experimental	72 hours	EC50	>900 mg/l
propylene carbonate	108-32-7	Water flea	Experimental	48 hours	EC50	>1,000 mg/l
propylene carbonate	108-32-7	Green algae	Experimental	72 hours	EC10	900 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
cobalt lithium oxide	12190-79-3	Data not available - insufficient			N/A	
Diethyl carbonate	105-58-8	Experimental Biodegradation	27 days	BOD	75 % BOD/ThBOD	OECD 301F - Manometric respirometry
dimethyl carbonate	616-38-6	Experimental Biodegradation	28 days	BOD	86 % BOD/ThBOD	OECD 301C - MITI test (I)
Ethylene Carbonate	96-49-1	Experimental Biodegradation	29 days	CO2 evolution	92.7 % weight	OECD 301B - Modified sturm or CO2
lithium hexafluorophosphate(1-)	21324-40-3	Experimental Hydrolysis		Half-life (t 1/2)	<1 minutes (t 1/2)	Non-standard method
propylene carbonate	108-32-7	Experimental Biodegradation	28 days	BOD	82 % BOD/ThBOD	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
cobalt lithium oxide	12190-79-3	Data not available or insufficient for	N/A	N/A	N/A	N/A

		classification				
Diethyl carbonate	105-58-8	Estimated Bioconcentration		Bioaccumulation factor	9.8	Estimated: Bioconcentration factor
dimethyl carbonate	616-38-6	Experimental Bioconcentration		Log Kow	0.354	Non-standard method
Ethylene Carbonate	96-49-1	Experimental Bioconcentration		Log Kow	0.11	Non-standard method
lithium hexafluorophosphate(1-)	21324-40-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
propylene carbonate	108-32-7	Experimental Bioconcentration		Log Kow	-0.41	Non-standard method

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Diethyl carbonate	105-58-8	Estimated Mobility in Soil	Koc	10 l/kg	Episuite™
dimethyl carbonate	616-38-6	Estimated Mobility in Soil	Koc	ERROR: Length cannot be greater than the length of the string.	Episuite™
Ethylene Carbonate	96-49-1	Estimated Mobility in Soil	Koc	ERROR: Length cannot be greater than the length of the string.	Episuite™

12.5. Results of the PBT and vPvB assessment

Not applicable

12.6. Endocrine disrupting properties

Not applicable

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN3480	UN3480	UN3480
14.2 UN proper shipping name	LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	LITHIUM ION BATTERIES

14.3 Transport hazard class(es)	9	9	9
14.4 Packing group	Not applicable.	Not applicable.	Not applicable.
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Tunnel Code	(E)	Not applicable.	Not applicable.
ADR Classification Code	M4	Not applicable.	Not applicable.
ADR Transport Category	2	Not applicable.	Not applicable.
ADR Multiplier	3	0	0
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

SECTION 15: Regulatory information

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

Global inventory status

Contact 3M for more information.

15.2. Chemical Safety Assessment

Not applicable.

SECTION 16: Other information

List of relevant H statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.

Revision information:

No revision information

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

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