SAFETY DATA SHEET

MOTOROLA SOLUTIONS

1. Identification

Product identifier **Lithium-ion and Lithium-ion Polymer Batteries (Li-ion Batteries)**

Other means of identification None.

Recommended use of the chemical and restrictions on use

Recommended use Lithium-ion battery.

Restrictions on use None known.

Details of manufacturer or importer

Company name Motorola Solutions Australia Pty Ltd

Address 10 Wesley Court
East Burwood VIC 3151
Australia

General information +61 3 9847 7500

Emergency phone number

CHEMTREC (Australia): +61 2 9037 2994

CHEMTREC (International): +1-703-741-5500

Customer number 204471

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards Not classified.

Health hazards

Acute toxicity, oral	Category 4
Skin corrosion/irritation	Category 1A to 1C
Serious eye damage/eye irritation	Category 1 to 2A
Sensitization, skin	Category 1
Carcinogenicity	Category 1A

Environmental hazards Not classified.

Under normal conditions of processing and use, exposure to the chemical constituents in this product is unlikely. The battery should not be opened or burned. Exposure to the ingredients contained within or their combustion products could be harmful. Hazards shown here apply to exposure that may occur from damaged or leaking batteries or under extreme heat conditions such as fire.

Label elements, including precautionary statements

Hazard symbol(s)

Signal word(s) Warning/Danger.

Hazard statement(s) Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause cancer.

Precautionary statement(s)

Prevention Handle with care. For safe handling, see Section 7.

Response See Sections 4, 6 and 8 for response information.

Storage Store as indicated in Section 7.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Other hazards which do not result in classification In the event of damage resulting in a leak of exposed materials, avoid contact with contents of an open or damaged cell or battery.

Supplemental information None.

3. Composition / information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients %
Positive electrode (One of the following: Lithiated cobalt oxides, Lithiated manganese oxides, Lithiated nickel-manganese-cobalt oxides)	12190-79-3, 12057-17-9, 346417-97-8	20-40
Negative electrode (Graphite)	7782-42-5	10-20
Binders (Polyvinylidene difluoride and/or polytetrafluoroethylene)	24937-79-9, 9002-84-0	0-3
Electrolyte salt (Lithium salt: one or more of lithium hexafluorophosphate and lithium tetrafluoroborate)	21324-40-3, 14283-07-9	1-5
Electrolyte solvent (Organic solvents including one or more of the following: Ethylene carbonate, Diethyl carbonate, Dimethyl carbonate, Ethyl methyl carbonate, and Propylene carbonate.)	96-49-1, 105-58-8, 616-38-6, 623-53-0, 108-32-7	5-20
Other components (Copper)	7440-50-8	5-10
Other components (Aluminum)	7429-90-5	5-40
Other components (Nickel)	7440-02-0	0-5
Other components (Polyethylene and/or polypropylene)	9002-88-4, 9003-07-0	1-3

All concentrations are in percent by weight unless otherwise indicated.

Ingredients shown are major constituents representative of various compositions for lithium-ion cells.

Exposure to hazardous ingredients is not anticipated under normal conditions of use. For further information please refer to Section 8.

4. First-aid measures

Description of necessary first aid measures

Inhalation	Exposure to contents of an open or damaged battery: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control centre immediately.
Skin contact	Exposure to contents of an open or damaged battery: Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician.
Eye contact	Exposure to contents of an open or damaged battery: Immediately flush eyes with plenty of water for at least 15 minutes. Provide eyewash station. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.
Ingestion	Exposure to contents of an open or damaged battery: Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Personal protection for first-aid responders	Use personal protective equipment sufficient to prevent direct skin or eye contact or inhalation of this product. If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Symptoms caused by exposure	Exposure to contents of an open or damaged battery: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause allergic skin reaction. Difficulty in breathing. Coughing. Prolonged exposure may cause chronic effects.
Medical attention and special treatment	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Leak from a damaged or opened battery: Do not use water unless flooding amounts are available.
Specific hazards arising from the chemical	In the event of fire and/or explosion do not breathe fumes. The evolved combustion products may contain carbon oxides, metal oxides, hydrogen fluoride, and should be considered hazardous.
Special protective equipment and precautions for fire fighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Firefighting equipment/instructions	Fight fire from protected location or safe distance. Keep upwind. Move containers from fire area if you can do so without risk. Avoid discharge into drains, water courses or onto the ground.
Hazchem Code	4W
General fire hazards	Under normal use, the battery does not exhibit flammable properties. In the event that the battery is abused and disassembly of the battery occurs resulting in exposure of internal components, the exposed solution, may be flammable and/or corrosive. Exposure to excessive heat may lead to venting or rupture of the sealed battery, exposing the internal components which may be corrosive and/or flammable. Vented gas would be flammable when in sufficient concentration.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	None under normal use conditions. In the event of damage resulting in a leak or exposed materials, avoid contact with contents of an open or damaged cell or battery. Wear protective clothing as described in section 8 of this safety data sheet.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
Environmental precautions	Avoid allowing material from exposed battery to contaminate soil, sanitary sewers, or waterways.
Methods and materials for containment and cleaning up	Leak from a damaged or opened battery: Contain spillage with sand or earth. Collect with absorbent, non-combustible material into suitable containers. For waste disposal, see Section 13 of the SDS.
Other issues relating to spills and releases	Clean up in accordance with all applicable regulations.

7. Handling and storage

Precautions for safe handling	Do not open, disassemble, crush or burn battery. Protect against physical damage. Do not expose battery to extreme heat or fire. Do not allow conductive material to touch the battery terminals. A dangerous short-circuit may occur and cause battery failure and fire. Remove contaminated clothing and protective equipment before entering eating areas. Wash hands after handling.
Conditions for safe storage, including any incompatibilities	Keep out of reach of children. Prevent short circuits. Store in original packaging. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Store away from incompatible materials (See Section 10).

8. Exposure controls and personal protection

Control parameters Follow standard monitoring procedures.

Occupational exposure limits

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m3	
		5 mg/m3	Fume.
		10 mg/m3	Dust.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
Graphite (CAS 7782-42-5)	TWA	3 mg/m3	Respirable dust.
Lithium manganese oxide (CAS 12057-17-9)	TWA	1 mg/m3	Dust.
Nickel (CAS 7440-02-0)	TWA	0.1 mg/m3	

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m3	Welding fume.
		5 mg/m3	Pyrophoric powder.
		10 mg/m3	Dust.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
Graphite (CAS 7782-42-5)	TWA	3 mg/m3	Respirable dust.
Lithium manganese oxide (CAS 12057-17-9)	TWA	1 mg/m3	
Nickel (CAS 7440-02-0)	TWA	1 mg/m3	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Cobalt lithium dioxide (CAS 12190-79-3)	TWA	0.02 mg/m3	
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Lithium manganese oxide (CAS 12057-17-9)	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.
Lithium tetrafluoroborate, anhydrous (CAS 14283-07-9)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
Nickel (CAS 7440-02-0)	TWA	1.5 mg/m3	Inhalable fraction.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
Cobalt lithium dioxide (CAS 12190-79-3)	TWA	0.1 mg/m3	
Copper (CAS 7440-50-8)	STEL	2 mg/m3	Inhalable dusts and mists.
	TWA	1 mg/m3	Inhalable dusts and mists.
		0.2 mg/m3	Fume.
Graphite (CAS 7782-42-5)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
Lithium manganese oxide (CAS 12057-17-9)	TWA	0.5 mg/m3	
Nickel (CAS 7440-02-0)	TWA	0.5 mg/m3	
Polyethylene (CAS 9002-88-4)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	4 mg/m3	Inhalable fraction.
		1.5 mg/m3	Respirable fraction.
Copper (CAS 7440-50-8)	TWA	0.01 mg/m3	Respirable fraction.
Graphite (CAS 7782-42-5)	TWA	4 mg/m3	Inhalable fraction.
		1.5 mg/m3	Respirable fraction.
Lithium manganese oxide (CAS 12057-17-9)	TWA	0.2 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.
Lithium tetrafluoroborate, anhydrous (CAS 14283-07-9)	TWA	1 mg/m3	Inhalable fraction.
Polyethylene (CAS 9002-88-4)	TWA	4 mg/m3	Inhalable dust.
		0.3 mg/m3	Respirable dust.

Biological limit values

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling time
Lithium tetrafluoroborate, anhydrous (CAS 14283-07-9)	7 mg/g	Fluoride	Creatinine in urine	*
	4 mg/g	Fluoride	Creatinine in urine	*

* - For sampling details, please see the source document.

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling time
Cobalt lithium dioxide (CAS 12190-79-3)	15 µg/l	Cobalt	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines Airborne exposures to hazardous substances are not expected when product is used for its intended purpose.

Appropriate engineering controls General ventilation normally adequate. Leak from a damaged or opened battery: Provide adequate ventilation if fumes or vapours are generated.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection None under normal conditions. Leak from a damaged or opened battery: Wear approved safety glasses or goggles and/or a face shield.

Skin protection

Hand protection None under normal conditions. Leak from a damaged or opened battery: Wear protective gloves.

Other None under normal conditions. Leak from a damaged or opened battery: Wear suitable protective clothing (lab coat and face shield) and gloves. Have a safety shower or eye wash station readily available.

Respiratory protection None under normal conditions. Leak from a damaged or opened battery: Wear suitable respiratory protection in the form of an approved half face inorganic vapour and gas/acid/particulate respirator.

Thermal hazards Not applicable.

Hygiene measures Do not store food, drink and tobacco near the product. Practice good housekeeping.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Battery.

Colour Not available.

Odour Not available.

Odour threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Battery can burst in a fire. Organic electrolyte leaking from a damaged battery is flammable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapour pressure Not available.

Vapour density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other physical and chemical parameters

Explosive properties Not explosive.

Oxidising properties Not oxidising.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Product is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Elevated temperatures. Shocks and physical damage. Do not open, disassemble, crush or burn battery. Do not allow conductive material to touch the battery terminals. A dangerous short-circuit may occur and cause battery failure and fire.
Incompatible materials	Do not immerse in seawater or other high conductivity liquids. Organic electrolyte - reacts with water to produce hydrogen fluoride.
Hazardous decomposition products	Thermal decomposition or combustion may produce: carbon oxides, metal oxides, hydrogen fluoride.

11. Toxicological information

Information on possible routes of exposure

Inhalation	Not relevant, due to the form of the product. Exposure to contents of an open or damaged battery: May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Not relevant, due to the form of the product. Exposure to contents of an open or damaged battery: Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Not relevant, due to the form of the product. Exposure to contents of an open or damaged battery: Causes serious eye damage.
Ingestion	Not relevant, due to the form of the product. Exposure to contents of an open or damaged battery: Causes digestive tract burns. Harmful if swallowed.
Symptoms related to exposure	Exposure not expected under normal use conditions. In the event that cell or battery is damaged, open, or leaking - inhalation, skin contact, and/or eye contact may be considered for routes of exposure. Signs and symptoms may include: Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause allergic skin reaction. Difficulty in breathing. Coughing. Prolonged exposure may cause chronic effects.
Acute toxicity	Expected to be a low hazard for usual industrial or commercial handling by trained personnel. Exposure to contents of an open or damaged battery: Harmful if swallowed.

Components	Species	Test results
Copper (CAS 7440-50-8)		
Acute		
Inhalation		
LC50	Rat	> 2.77 mg/l, 4 hours
Oral		
LD50	Rat	481 mg/kg
Polyethylene (CAS 9002-88-4)		
Acute		
Oral		
LD50	Rat	> 2000 mg/kg
Propylene carbonate (CAS 108-32-7)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 5 mg/l
Oral		
LD50	Rat	> 5000 mg/kg

Skin corrosion/irritation	Exposure to contents of an open or damaged battery: Causes severe skin burns.
Serious eye damage/irritation	Exposure to contents of an open or damaged battery: Causes serious eye damage.
Respiratory or skin sensitisation	
Respiratory sensitisation	No data available.

Skin sensitisation Exposure to contents of an open or damaged battery: May cause an allergic skin reaction.

Germ cell mutagenicity No data available.

Carcinogenicity Exposure to contents of an open or damaged battery: May cause cancer.

ACGIH Carcinogens

Aluminium (CAS 7429-90-5)	A4 Not classifiable as a human carcinogen.
Cobalt lithium dioxide (CAS 12190-79-3)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Lithium manganese oxide (CAS 12057-17-9)	A4 Not classifiable as a human carcinogen.
Lithium tetrafluoroborate, anhydrous (CAS 14283-07-9)	A4 Not classifiable as a human carcinogen.
Nickel (CAS 7440-02-0)	A5 Not suspected as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cobalt lithium dioxide (CAS 12190-79-3)	2B Possibly carcinogenic to humans.
Nickel (CAS 7440-02-0)	2B Possibly carcinogenic to humans.
Polyethylene (CAS 9002-88-4)	3 Not classifiable as to carcinogenicity to humans.
Polypropylene (CAS 9003-07-0)	3 Not classifiable as to carcinogenicity to humans.
Polytetrafluoroethylene (CAS 9002-84-0)	3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity No data available.

Specific target organ toxicity - single exposure No data available.

Specific target organ toxicity - repeated exposure No data available.

Aspiration hazard No data available.

Chronic effects Exposure to contents of an open or damaged battery: Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

Other information Exposure to hazardous ingredients is not anticipated under normal conditions of use.

12. Ecological information

Ecotoxicity Based on available data, the classification criteria are not met for hazardous to the aquatic environment. However, in case of accidental release of large amounts a hazardous effect cannot be excluded.

Components		Species	Test results
Nickel (CAS 7440-02-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1 mg/l, 48 hours
			1 mg/l, 48 Hours
	LC50	Calanoid copepod (Pseudodiaptomus coronatus)	6.17 - 12.4 mg/l, 72 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Diethyl carbonate (CAS 105-58-8)	1.21

Mobility in soil No data available for this product.

Other adverse effects None known.

13. Disposal considerations

Disposal methods Recycle the batteries, as the primary disposal method. Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Residual waste Dispose of in accordance with local regulations. This product and its container must be disposed of in a safe manner.

Contaminated packaging If contaminated by a leaking or damaged battery, empty containers should be taken to anapproved waste handling site for recycling or disposal.

14. Transport information

UN 3480, Lithium-ion batteries, 9
UN 3481, Lithium-ion batteries contained in equipment, 9
UN 3481, Lithium-ion batteries packed with equipment, 9

The Watt-hour rating for all Motorola Solutions, Inc. lithium-ion products is ≤ 20 Watt-hours for cells and ≤ 100 Watt hours for batteries.

When packaged and shipped by Motorola Solutions, Inc., these batteries are tested, packaged, marked, and labeled in accordance with all applicable requirements for transport by mode of shipment (air, sea or ground), as follows:

1) International Air Transport Association (IATA) and International Civil Aviation Organization (ICAO) Technical Instructions Dangerous Goods Regulations:
    a) PI 965 Section IB (UN 3480, Lithium-ion batteries), offered for transport at a state of charge (SOC) not exceeding 30% of their rated design capacity.
    b) PI 966 Section II (UN 3481, Lithium-ion batteries packed with equipment), and PI 967 Section II (UN 3481, Lithium-ion batteries contained in equipment);
2) International Maritime Dangerous Goods (IMDG) Code Special Provision 188;
3) Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) Special Provision 188;
4) Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) Special Provision 188;
5) UN Model Regulations Special Provisions 188;

All Motorola Solutions Li-ion batteries are tested in accordance with the UN Manual of Tests and Criteria, Part III, Subsection 38.3 Revision 3, Amendment 1 or any subsequent revision and amendment.

15. Regulatory information

Safety, health and environmental regulations

National regulations No poison schedule number allocated. This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals (GHS 7).

Australia National Pollutant Inventory (NPI): Threshold quantity

Cobalt lithium dioxide (CAS 12190-79-3)	10 TONNES/YR Threshold Category: 1
Copper (CAS 7440-50-8)	10 TONNES/YR Threshold Category: 1
Lithium manganese oxide (CAS 12057-17-9)	10 TONNES/YR Threshold Category: 1
Lithium tetrafluoroborate, anhydrous (CAS 14283-07-9)	10 TONNES/YR Threshold Category: 1
Nickel (CAS 7440-02-0)	10 TONNES/YR Threshold Category:

High Volume Industrial Chemicals (HVIC)

Aluminium (CAS 7429-90-5)	100000 - 999999 TONNES See the regulation for additional information.
Copper (CAS 7440-50-8)	10000 - 99999 TONNES See the regulation for additional information.
Graphite (CAS 7782-42-5)	1000 - 9999 TONNES See the regulation for additional information.
Nickel (CAS 7440-02-0)	1000 - 9999 TONNES See the regulation for additional information.
Polyethylene (CAS 9002-88-4)	1000 - 9999 TONNES See the regulation for additional information.

Importation of Ozone Deleting Substances (Customs (Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Aluminium (CAS 7429-90-5)	2000 TONNES/YR Threshold Category: 2B 400 TONNES/YR Threshold Category: 2A
Copper (CAS 7440-50-8)	2000 TONNES/YR Threshold Category: 2B
Graphite (CAS 7782-42-5)	2000 TONNES/YR Threshold Category: 2B 400 TONNES/YR Threshold Category: 2A
Nickel (CAS 7440-02-0)	2000 TONNES/YR Threshold Category: 2B
Polyethylene (CAS 9002-88-4)	2000 TONNES/YR Threshold Category: 2B 400 TONNES/YR Threshold Category: 2A

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs (Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Lithium tetrafluoroborate, anhydrous (CAS 14283-07-9)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date	29-Jan-2025
Revision date	29-Jan-2025
Disclaimer	Motorola Solutions, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.