

1. Identification

Product identifier	Deka Duration Lithium Ion Battery
Other means of identification	None.
Recommended use	Battery back-up applications.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer/Supplier	KCM Marketing, Inc., dba MK Battery, a subsidiary of East Penn Manufacturing Co, Inc.
Address	1631 South Sinclair Street, Anaheim, CA. 92806
Telephone number	714-937-1033
Contact person	MK Battery Customer Service
Emergency telephone number	USA/Canada: CHEMTREC (800) 424-9300, Outside USA 1 (703) 527-3887
E-mail	durationsupport@dekabatteries.com

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity, repeated exposure	Category 1 (bone, teeth)
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	

Label elements



Signal word Danger

Hazard statement The materials contained in this product may only represent a hazard if the integrity of the cell or battery is compromised; physically, thermally, or electrically abused. The below are the hazards anticipated under those conditions:

Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. Causes damage to organs (bone, teeth) through prolonged or repeated exposure. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.

Response

In case of fire: Use appropriate media to extinguish. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If eye irritation persists: Get medical advice/attention. Get medical advice/attention if you feel unwell. Collect spillage. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage	Store in a well-ventilated place. Keep cool. Store as indicated in Section 7.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Presents a physical hazard which is not otherwise classified. Incorrect handling or storage of lithium Ion batteries may cause thermal runaway resulting in fire or explosion.
Supplemental information	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Under normal conditions of processing and use, exposure to the chemical constituents in this product is unlikely. The chemicals are contained in a sealed aluminum housing. Risk of exposure occurs only if the battery is mechanically, thermally or electrically abused. If this occurs, exposure to the electrolyte solution contained within can occur by Inhalation, Ingestion, eye contact and skin contact.
	Additional Notes: The liquid contained in the battery is flammable. CAUTION: Do not dispose in fire, mix with other battery types, charge above specified rate, connect improperly, or short circuit, which may result in overheating, explosion or leakage of cell contents. Do not open or disassemble. Do not puncture, deform or incinerate.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Lithium Iron Phosphate Carbon Coated (LiFeP04)	15365-14-7	36.53
Graphite	7782-42-5	19.39
Copper	7440-50-8	9.74
Carbonic Acid, Ethyl Methyl Carbonate	623-53-0	9.25
Aluminium	7429-90-5	6.5
Ethylene carbonate	96-49-1	5.84
Polypropylene	9003-07-0	5.39
Lithium hexafluorophosphate (1-)	21324-40-3	2.75
Propylene carbonate	108-32-7	2.04
Polyvinylidene Fluoride	24937-79-9	1.31
Diethyl carbonate	105-58-8	1.03
Boehmite	1318-23-6	0.19
Carboxymethyl Cellulose	9000-11-7	0.03
Carbon Black	1333-86-4	0.01

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The manufacturer has claimed the exact percentage as trade secret under the OSHA Hazard Communication Standard.

4. First-aid measures

Inhalation	Exposure to contents of an open or damaged battery: Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Exposure to contents of an open or damaged battery: Remove contaminated clothing immediately and wash skin with soap and water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Exposure to contents of an open or damaged battery: Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Ingestion	Exposure to contents of an open or damaged battery: Immediately rinse mouth and drink plenty of water. Call an ambulance and take these instructions. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health. Exposure to contents of an open or damaged battery: Causes severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Exposure to contents of an open or damaged battery: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Dry chemical powder (ABC). Carbon dioxide (CO ₂). Foam.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	The liquid contained in the battery is flammable. Containers can burst violently when heated, due to excess pressure build-up. Fire may produce irritating, corrosive and/or toxic gases. During water application, caution is advised as burning pieces of flammable particles may be ejected from the fire. Carbon oxides (CO _x). Hydrogen Fluoride. Metal oxides.
Special protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	In the event of fire do not breathe fumes. Copious amounts of cold water or water-based foam may be used to cool burning cells or batteries.
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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not breathe mist/vapors/spray. Leak from a damaged or opened battery: Avoid contact with skin and eyes.
Methods and materials for containment and cleaning up	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Leak from a damaged or opened battery: Wipe up with non combustible absorbent material. Place in a designated labeled waste container, dispose in accordance with local regulations.
Environmental precautions	Do not contaminate water sources or sewer.

7. Handling and storage

Precautions for safe handling	Keep out of reach of children. Do not breathe fume/vapors/dust. Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Batteries are designed to be recharged. However, improperly charging a cell or battery may cause the product to flame or leak. Use only approved chargers and procedures. Do not allow conductive material to touch the battery terminals. A dangerous short-circuit may occur and cause battery failure and fire. CAUTION: Do not dispose in fire, mix with other battery types, charge above specified rate, connect improperly, or short circuit, which may result in overheating, explosion or leakage of cell contents. Do not open, disassemble, crush or burn battery. Do not expose battery to extreme heat or fire. Extended short-circuiting creates high temperatures in the cell. High temperatures can cause burns in skin or cause the cell to fume. Avoid reversing the battery polarity within the battery assembly. To do so may cause the cell to flame or leak.
Conditions for safe storage, including any incompatibilities	Avoid mechanical or electrical abuse. Keep out of reach of children. Batteries should be separated from other materials and stored in a non-combustible, well ventilated structure with sufficient clearance between walls and battery stacks. Do not place batteries near heating equipment. Store in a cool, dry place. Do not store batteries in a manner that allows terminals to short circuit. Store away from incompatible materials (See Section 10). Store batteries in a cool dry ventilated area that is subject to little temperature change. Do not place batteries near heating equipment or expose to direct sunlight for long periods.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.
Carbon Black (CAS 1333-86-4)	PEL	3.5 mg/m ³	
Copper (CAS 7440-50-8)	PEL	1 mg/m ³	Dust and mist.
		0.1 mg/m ³	Fume.
Graphite (CAS 7782-42-5)	PEL	5 mg/m ³	Respirable fraction.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Lithium hexafluorophosphate (1-) (CAS 21324-40-3)	PEL	15 mg/m3	Total dust.
		2.5 mg/m3	

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value	Form
Lithium hexafluorophosphate (1-) (CAS 21324-40-3)	TWA	2.5 mg/m3	Dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
Graphite (CAS 7782-42-5)	TWA	15 mppcf

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Boehmite (CAS 1318-23-6)	TWA	1 mg/m3	Respirable fraction.
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
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.
Lithium hexafluorophosphate (1-) (CAS 21324-40-3)	TWA	2.5 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m3	Welding fume or pyrophoric powder.
		5 mg/m3	Respirable.
		10 mg/m3	Total
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m3	
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0.1 mg/m3	Fume.
Graphite (CAS 7782-42-5)	TWA	2.5 mg/m3	Respirable.
Lithium hexafluorophosphate (1-) (CAS 21324-40-3)	TWA	2.5 mg/m3	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Lithium hexafluorophosphate (1-) (CAS 21324-40-3)	3 mg/l	Fluoride	Urine	*
	2 mg/l	Fluoride	Urine	*

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

Exposure guidelines Follow standard monitoring procedures.

Appropriate engineering controls	Under conditions of normal use, batteries do not emit hazardous or regulated substances. .No engineering controls are required for handling batteries that have not been damaged.
	Leak from a damaged or opened battery: Explosion proof exhaust ventilation should be used. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. Provide eyewash station and safety shower.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Not necessary under normal conditions. Leak from a damaged or opened battery: Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Not required under normal conditions of handling. Leak from a damaged or opened battery: Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Skin protection	
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	None under normal conditions.
	Leak from a damaged or opened battery: Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. In the event of a fire, wear SCBA and thermally protective outer garments. Use an approved respirator if there is a risk of exposure to dust at levels exceeding the exposure limits.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Battery Module containing liquid flammable electrolyte.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	This product is considered stable. However, avoid contact with ignition sources. The flash point of Carbonic Acid, Ethyl Methyl CAS# 623-53-0 is 23 °C. This is the major constituent of the liquid flammable electrolyte.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor 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	This product is in a solid state.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	The product is stable under normal conditions of use, storage and transport.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use. However, avoid contact with ignition sources (e.g. sparks, open flame, heated surfaces).
Conditions to avoid	Do not allow conductive material to touch the battery terminals. A dangerous short-circuit may occur and cause battery failure and fire. Do not puncture, deform, or incinerate. Heat, sparks, flames, elevated temperatures.
Incompatible materials	Strong oxidizers.
Hazardous decomposition products	Irritating and/or toxic fumes and gases may be emitted upon the products decomposition. Carbon oxides. Hydrogen fluoride. Metal oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No inhalation hazard under normal conditions. Exposure to contents of an open or damaged battery: Dust may irritate respiratory system. Prolonged inhalation may be harmful.
Skin contact	Exposure to contents of an open or damaged battery: Causes skin irritation.
Eye contact	Under normal conditions of intended use, this product does not pose an eye hazard. In the event that cell or battery is damaged, open, or leaking – irritation with injury resulting in permanent impairment of vision and chemical burn may occur.
Ingestion	Exposure to contents of an open or damaged battery: May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics
Under normal conditions of intended use, this material does not pose a risk to health. Exposure to contents of an open or damaged battery: Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not known. Not expected to be acutely toxic.

Components	Species	Test Results
Diethyl carbonate (CAS 105-58-8)		
<u>Acute</u>		
Other		
LD50	Rat	8500 mg/kg
Propylene carbonate (CAS 108-32-7)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg

Skin corrosion/irritation Exposure to contents of an open or damaged battery: Causes skin irritation.

Serious eye damage/eye irritation Exposure to contents of an open or damaged battery: Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization Exposure to contents of an open or damaged battery: This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Exposure to contents of an open or damaged battery: Risk of cancer cannot be excluded with prolonged exposure.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon Black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.
Polypropylene (CAS 9003-07-0) 3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Carbon Black (CAS 1333-86-4) Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Exposure to contents of an open or damaged battery: Causes damage to organs through prolonged or repeated exposure: Bones. Teeth.

Lithium hexafluorophosphate (CAS# 21324-40-3): Causes damage to organs (bone, teeth) through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Components	Species	Test Results
Copper (CAS 7440-50-8)		
Aquatic		
<i>Chronic</i>		
Other	NOEC Juga plicifera	6 µg/l
Graphite (CAS 7782-42-5)		
Aquatic		
Fish	LC50 Onchorhynchus mykiss	> 1000 mg/l

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

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.

Other adverse effects None known.

13. Disposal considerations

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

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose 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 an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN3480
UN proper shipping name Lithium Ion Batteries
Transport hazard class(es)
Class 9
Subsidiary risk -
Label(s) Lithium Battery

Packing group -
Environmental hazards
Marine pollutant The battery as shipped would not be a Marine Pollutant / Environmentally hazardous.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Packaging exceptions 185
Packaging non bulk 185
Packaging bulk None

IATA

UN number UN3480
UN proper shipping name Lithium Ion Batteries
Transport hazard class(es)
Class 9
Subsidiary risk -
Label(s) Lithium Battery
Packing group -
Environmental hazards The battery as shipped would not be a Marine Pollutant / Environmentally hazardous.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN3480
UN proper shipping name Lithium Ion Batteries
Transport hazard class(es)
Class 9
Subsidiary risk -
Label(s) 9A
Packing group -
Environmental hazards
Marine pollutant The battery as shipped would not be a Marine Pollutant / Environmentally hazardous.
EmS F-A, S-I
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

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

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Lithium Iron Phosphate Carbon Coated (LiFeP04) 1.0 % One-Time Export Notification only.
(CAS 15365-14-7)

CERCLA Hazardous Substance List (40 CFR 302.4)

Copper (CAS 7440-50-8) Listed.
Diethyl carbonate (CAS 105-58-8) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Toxic Substances Control Act (TSCA) All components of the mixture on the TSCA 8(b) inventory are designated "active".

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)
Hazard not otherwise classified (HNOC)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Copper	7440-50-8	9.74

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.**US state regulations****US. Massachusetts RTK - Substance List**

Carbon Black (CAS 1333-86-4)
 Copper (CAS 7440-50-8)
 Diethyl carbonate (CAS 105-58-8)
 Ethylene carbonate (CAS 96-49-1)
 Graphite (CAS 7782-42-5)

US. New Jersey Worker and Community Right-to-Know Act

Carbon Black (CAS 1333-86-4)
 Copper (CAS 7440-50-8)
 Diethyl carbonate (CAS 105-58-8)
 Graphite (CAS 7782-42-5)
 Lithium hexafluorophosphate (1-) (CAS 21324-40-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Carbon Black (CAS 1333-86-4)
 Copper (CAS 7440-50-8)
 Diethyl carbonate (CAS 105-58-8)
 Ethylene carbonate (CAS 96-49-1)
 Graphite (CAS 7782-42-5)
 Lithium hexafluorophosphate (1-) (CAS 21324-40-3)

US. Rhode Island RTK

Carbon Black (CAS 1333-86-4)
 Copper (CAS 7440-50-8)
 Graphite (CAS 7782-42-5)

California Proposition 65

WARNING: This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Carbon Black (CAS 1333-86-4) Listed: February 21, 2003

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Aluminium (CAS 7429-90-5)
 Carbon Black (CAS 1333-86-4)
 Copper (CAS 7440-50-8)
 Lithium hexafluorophosphate (1-) (CAS 21324-40-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
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

Country(s) or region	Inventory name	On inventory (yes/no)*
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply 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, including date of preparation or last revision

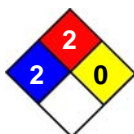
Issue date 22-September-2021

Revision date 02-March-2022

Version # 03

HMIS® ratings Health: 2*
Flammability: 2
Physical hazard: 0

NFPA ratings



List of abbreviations LD50: Lethal Dose 50%.
LC50: Lethal Concentration 50%.
NOEC: No Observed Effect Concentration.

References IARC Monographs. Overall Evaluation of Carcinogenicity
Registry of Toxic Effects of Chemical Substances (RTECS)

Disclaimer The information in this SDS was obtained from sources which we believe are reliable, but no warranty or representation as to its accuracy or completeness is hereby given. Users should consider the information herein only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal, the safety and health of employees and customers and the protection of the environment.