SAFETY DATA SHEET

Issuing Date No data available

Revision Date 19-Apr-2018

Revision Number 1

NGHS / English



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1. IDENTIFICATION

Product identifier

Product Name AHB701718HPJT

Other means of identification

Product Code(s) 1449540

Recommended use of the chemical and restrictions on use

Recommended Use LITHIUM ION BATTERIES

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Identification Synergy

Address 7F, No9, Park Avenue II,

Science-based Industrial Park

HsinChu N/A 30075 TW

Telephone Phone:886-3-5643700

Fax:886-3-5646767

E-mail stellah0917@gmail.com

Emergency telephone number

Company Emergency Phone

886-911254622

Number

2. HAZARDS IDENTIFICATION

Classification



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Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Carcinogenicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 1

This is a battery. In case of rupture: the above hazards exist.

Appearance Solid Physical state Solid Odor No data available

GHS Label elements, including precautionary statements

Danger

Hazard statements

Harmful if swallowed
Toxic in contact with skin
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause cancer

Causes damage to organs through prolonged or repeated exposure



Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Specific treatment (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Skin

IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor/physician if you feel unwell

Remove/Take off immediately all contaminated clothing



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Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Very toxic to aquatic life with long lasting effects.

Unknown acute toxicity

90.14 % of the mixture consists of ingredient(s) of unknown toxicity

80.04 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

87.94 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

90.14 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

90.14 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

90.14 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

<u>Mixture</u>

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Lithium Cobalt Oxide (CoLiO2)	12190-79-3	30.24	-	-
Ci 77266	1333-86-4	17.67	-	-
Aluminum	7429-90-5	14.28	-	-
Copper	7440-50-8	9.37	-	-
Phosphate(1-), hexafluoro-, lithium	21324-40-3	2.2	-	-
Propylene carbonate	108-32-7	1.21	-	-
Nickel	7440-02-0	0.77	-	-
1,3-Propane sultone	1120-71-4	0.4	-	-
Propylene imine	75-55-8	0.2	-	-

4. FIRST AID MEASURES

First aid measures

General advice

First aid is upon rupture of sealed battery. Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical



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advice/attention.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur. If breathing has

stopped, give artificial respiration. Get medical attention immediately. If symptoms persist,

call a physician.

Eye contact Get immediate medical advice/attention. Rinse immediately with plenty of water, also under

the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact

lenses, if present and easy to do. Continue rinsing. Do not rub affected area.

Skin contact Get immediate medical advice/attention. Wash off immediately with soap and plenty of

water while removing all contaminated clothes and shoes. May cause an allergic skin

reaction.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person. Get immediate medical

advice/attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protective equipment as

required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives. Burning sensation. Coughing and/ or wheezing. Difficulty in

breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Products Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES



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Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak. Avoid generation of dust. Do not breathe dust.

Other Information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling In case of rupture: Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Avoid

breathing dust/fume/gas/mist/vapors/spray. Avoid generation of dust.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lithium Cobalt Oxide (CoLiO2)	TWA: 0.02 mg/m ³	-	
12190-79-3			
Ci 77266	TWA: 3 mg/m ³ inhalable	TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³
1333-86-4	particulate matter	(vacated) TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³
			TWA: 0.1 mg/m ³ Carbon black
			in presence of Polycyclic
			aromatic hydrocarbons PAH
Aluminum	TWA: 1 mg/m ³ respirable	TWA: 15 mg/m ³ total dust	TWA: 10 mg/m ³ total dust
7429-90-5	particulate matter	TWA: 5 mg/m ³ respirable	TWA: 5 mg/m ³ respirable
		fraction	dust
		(vacated) TWA: 15 mg/m ³ total	
		dust	
		(vacated) TWA: 5 mg/m ³	
		respirable fraction (vacated)	
		TWA: 5 mg/m ³ Al Aluminum	
Copper	TWA: 0.2 mg/m ³ fume TWA: 1	TWA: 0.1 mg/m ³ fume	IDLH: 100 mg/m ³ dust, fume



7440-50-8	mg/m³ Cu dust a		and mist	TWA: 1 mg/m³ dust and mist (vacated) TWA: 0.1 mg/m³ Cu dust, fume, mist		and mist TWA: 1 mg/m³ dust and mist TWA: 0.1 mg/m³ fume	
Phosphate(1-), hexaflucture lithium 21324-40-3	oro-,	TWA: 2.5 mg	g/m³ F	TWA: 2.5 mg/m³ F (vacated) TWA: 2.5 mg/m³			DLH: 250 mg/m ³ F
Nickel		TWA: 1.5 m	ig/m³		A: 1 mg/m ³	1	IDLH: 10 mg/m ³
7440-02-0		0.751 0.4) TWA: 1 mg/m ³	Т	WA: 0.015 mg/m ³
Propylene imine 75-55-8		STEL: 0.4	•		/A: 2 ppm A: 5 mg/m ³		IDLH: 100 ppm
/5-55-6		TWA: 0.2 p S*	ppm		d) TWA: 2 ppm		TWA: 2 ppm TWA: 5 mg/m ³
) TWA: 5 mg/m ³		1 vv/ t. 5 mg/m
					cated) S*		
					S*		
Chemical name		Alberta		Columbia	Ontario TWAE		Quebec
Lithium Cobalt Oxide	TV	VA: 0.02 mg/m ³	TWA: 0.0)2 mg/m ³	TWA: 0.02 mg/	m ³	TWA: 0.02 mg/m ³
(CoLiO2)							
12190-79-3 Ci 77266		WA: 3.5 mg/m ³	T\\/ A · 2	s mg/m ³	TWA: 3 mg/m	.3	TWA: 3.5 mg/m ³
1333-86-4	'	WA. 3.5 mg/m	IVVA. 3	ing/iii	TVVA. 3 mg/m		TVVA. 3.5 mg/m²
Aluminum	TWA	: 10 mg/m ³ TWA: 5	TWA: 1.	0 mg/m ³	TWA: 1 mg/m	3 -	TWA: 10 mg/m ³ TWA: 5
7429-90-5		mg/m³		J	o d		mg/m³
Copper		WA: 0.2 mg/m ³		mg/m³	TWA: 0.2 mg/r		TWA: 0.2 mg/m ³
7440-50-8		ΓWA: 1 mg/m ³		2 mg/m ³	TWA: 1 mg/m		TWA: 1 mg/m ³
Phosphate(1-), hexafluoro-, lithium 21324-40-3	T	WA: 2.5 mg/m ³	TWA: 2.	5 mg/m ³	TWA: 2.5 mg/r	n ³	TWA: 2.5 mg/m ³
21324-40-3 Nickel	т.	WA: 1.5 mg/m ³	Τ\//Δ· ∩ ()5 mg/m ³	TWA: 1 mg/m	3	TWA: 1 mg/m ³
7440-02-0	'	۷۷ A. 1.3 mg/m	1 VV A. U.C	o mg/m	1 vv A. 1 ilig/ili	'	TVVA. TING/III
1,3-Propane sultone 1120-71-4			TW	/A:	TWA:		
Propylene imine		TWA: 2 ppm	TWA:	2 ppm	TWA: 0.2 ppn		TWA: 2 ppm
75-55-8	T	WA: 4.7 mg/m ³			STEL: 0.4 ppr	n	TWA: 4.7 mg/m ³
		Skin			Skin		Skin

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d

962 (11th Cir., 1992). See section 15 for national exposure control parameters.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves,



including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid breathing dust/fume/gas/mist/vapors/spray.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical state Solid Appearance Solid

Odor No data available
Color No information available
Odor Threshold No data available

<u>Property</u> <u>Values</u> <u>Remarks Method</u>

pН No data available None known Melting / freezing point No data available None known Boiling point / boiling range No data available None known **Flash Point** No data available None known **Evaporation Rate** No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability limit No data available

Lower flammability limit No data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water Solubility Insoluble in water

Solubility(ies) No data available None known

Partition coefficient: n-octanol/waterNot Applicable

Autoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone knownKinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Other Information

Explosive properties No information available Oxidizing properties No information available **Softening Point** No information available Molecular Weight No information available **VOC Content (%)** No information available **Liquid Density** No information available **Bulk Density** No information available **Particle Size** No information available **Particle Size Distribution** No information available

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to avoid Excessive heat.



Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known or supplied information

In case of rupture:

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

respiratory tract. Harmful by inhalation. (based on components).

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye

irritation. (based on components). Irritating to eyes.

Skin contact Specific test data for the substance or mixture is not available. May cause sensitization by

skin contact. Causes skin irritation. Toxic in contact with skin. (based on components). Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on

components).

Information on toxicological effects

Symptoms Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes. Coughing

and/ or wheezing.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document ...

ATEmix (oral) 1,269.00 mg/kg
ATEmix (dermal) 255.00 mg/kg
ATEmix (inhalation-gas) 4,930.49 mg/L
ATEmix (inhalation-dust/mist) 2.47 mg/L
ATEmix (inhalation-vapor) 24.70 mg/L

Unknown acute toxicity 90.14 % of the mixture consists of ingredient(s) of unknown toxicity

80.04 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

87.94 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

 $90.14\ \%$ of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

90.14 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

90.14 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ci 77266	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-
Propylene carbonate	= 29000 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Nickel	> 9000 mg/kg (Rat)	-	> 10.2 mg/L (Rat) 1 h



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1,3-Propane sultone	= 100 mg/kg (Rat) = 157	-	-
	mg/kg (Rat)		
Propylene imine	= 19 mg/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationClassification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity Classification based on data available for ingredients. Contains a known or suspected

carcinogen.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Lithium Cobalt Oxide (CoLiO2) 12190-79-3	А3	Group 2B	Reasonably Anticipated	Х
Ci 77266 1333-86-4	А3	Group 2B	-	Х
Nickel 7440-02-0	-	Group 2B	Reasonably Anticipated	X
1,3-Propane sultone 1120-71-4	А3	Group 2A	Reasonably Anticipated	X
Propylene imine 75-55-8	А3	Group 2B	Reasonably Anticipated	Х

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposureCauses damage to organs through prolonged or repeated exposure.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to

DOT



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Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to	Daphnia Magna (Water
One mean name	Toxicity to Aigac	Toxicity to Fight	Microorganisms	Flea)
Ci 77266	-	-	-	24h EC50: > 5600 mg/L
Copper	96h EC50: 0.031 -	96h LC50: = 0.052 mg/L	_	48h EC50: = 0.03 mg/L
Сорреі	0.054 mg/L	(Oncorhynchus mykiss)	_	4011 E030: = 0.03 mg/E
	(Pseudokirchneriella	96h LC50: < 0.3 mg/L		
	subcapitata) 72h EC50:	(Pimephales promelas)		
	0.0426 - 0.0535 mg/L	96h LC50: 0.0068 -		
		0.0156 mg/L (Pimephales		
	subcapitata)	promelas) 96h LC50: =		
	Subcapitata)			
		0.2 mg/L (Pimephales promelas) 96h LC50: =		
		0.3 mg/L (Cyprinus		
		carpio) 96h LC50: =		
		0.112 mg/L (Poecilia		
		reticulata) 96h LC50: =		
		0.8 mg/L (Cyprinus		
		carpio) 96h LC50: = 1.25		
		mg/L (Lepomis		
		macrochirus)		
Propylene carbonate	72h EC50: > 500 mg/L		EC50 > 10000 mg/L 17 h	48h EC50: > 500 mg/L
	(Desmodesmus	(Leuciscus idus) 96h		
	subspicatus)	LC50: > 1000 mg/L		
		(Cyprinus carpio)		
Nickel	72h EC50: = 0.18 mg/L	96h LC50: = 1.3 mg/L	-	48h EC50: = 1 mg/L 48h
	(Pseudokirchneriella	(Cyprinus carpio) 96h		EC50: > 100 mg/L
	subcapitata) 96h EC50:	LC50: > 100 mg/L		
	0.174 - 0.311 mg/L	(Brachydanio rerio) 96h		
	(Pseudokirchneriella	LC50: = 10.4 mg/L		
	subcapitata)	(Cyprinus carpio)		

Persistence and Degradability

No information available.

Bioaccumulation

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Chemical name	Log Pow
Propylene carbonate	0.48

Mobility No information available.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

Chemical name	DCDA Halogopated	RCRA - P Series Wastes	DCDA E Sorios Wastes	DCDA K Sorios Wastos
Chemical name	NONA - Halogerialeu	NONA - F Selles Wasies	NONA - F Selles Wasies	NONA - N Selles Wasies
	Organic Compounds			



Propylene imine	P067	
75-55-8		

California Waste Codes

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This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Lithium Cobalt Oxide (CoLiO2)	Toxic
12190-79-3	
Aluminum	Ignitable powder
7429-90-5	
Copper	Toxic
7440-50-8	
Nickel	Toxic powder
7440-02-0	Ignitable powder

14. TRANSPORT INFORMATION

Note:

The transportation of primary lithium cells and batteries is regulated by the International Civil Aviation Organization, International Air Transport Association, International Maritime Dangerous Goods Code and the US Department of Transportation. The batteries must meet the following criteria for shipment: 1. Air shipments must meet the requirements listed in Special Provision A45 of the International Air Transport Association Dangerous Goods Regulations. 2. Meet the requirements for the US Department of Transportation listed in 49 CFR 173.185. 3. The transport of primary lithium batteries is prohibited aboard passenger aircraft. Refer to the Federal Register December 15, 2004 (Hazardous Materials; Prohibited on the Transportation of Primary Lithium Batteries and Cells Aboard Passenger Aircraft; Final Rule)

Lithium batteries shipped as "Lithium batteries", "Lithium batteries packed with equipment", or "Lithium batteries contained in equipment" may not be classified as "Dangerous Goods" when shipped in accordance with "special provision A45 of IATA-DGR" or "special provision 188 of IMO-IMDG Code"

DOTProper Shipping Name

NOT REGULATED NON-REGULATED

Hazard Class

N/A

Marine Pollutant

This product contains a chemical which is listed as a severe marine pollutant according to

DOT

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TDG Not regulated

Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to

TDG.

MEX Not regulated

ICAO Not regulated

<u>IATA</u> Not regulated

Proper Shipping Name NON REGULATED

Hazard Class N/A

IMDG/IMO Not regulated

Hazard Class N/A EmS-No. F-A, S-I

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

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

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

International Inventories

TSCA

Contact supplier for inventory compliance status.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Lithium Cobalt Oxide (CoLiO2) - 12190-79-3	12190-79-3	30.24	0.1
Aluminum - 7429-90-5	7429-90-5	14.28	1.0
Copper - 7440-50-8	7440-50-8	9.37	1.0
Nickel - 7440-02-0	7440-02-0	0.77	0.1
1,3-Propane sultone - 1120-71-4	1120-71-4	0.4	0.1
Propylene imine - 75-55-8	75-55-8	0.2	0.1

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications. Under the amended regulations at 40 CFR 370, EPCRA 311/312 Tier II reporting for the 2017 calendar year will need to be consistent with updated hazard classifications.



CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable	CWA - Toxic Pollutants	CWA - Priority	CWA - Hazardous
	Quantities		Pollutants	Substances
Copper 7440-50-8		X	Х	
Nickel 7440-02-0		X	Х	

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Copper 7440-50-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Nickel 7440-02-0	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
1,3-Propane sultone 1120-71-4	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Propylene imine 75-55-8	1 lb	1 lb	RQ 1 lb final RQ RQ 0.454 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65			
Ci 77266 - 1333-86-4	carcinogen, 2/21/2003 (airborne, unbound particles of respirable			
	size)			
Nickel - 7440-02-0	carcinogen, 10/1/1989 (metallic)			
1,3-Propane sultone - 1120-71-4	carcinogen, 1/1/1988			
Propylene imine - 75-55-8	carcinogen, 1/1/1988			

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey		Pennsylvania	Rhode Island	Illinois
		S			
Lithium Cobalt Oxide (CoLiO2)	X		X	X	X
12190-79-3					
Ci 77266	Х	Х	Χ		Х
1333-86-4					
Aluminum	Х	Х	Χ	Х	
7429-90-5					
Copper	Х	Х	Х	Х	Х
7440-50-8					
Phosphate(1-), hexafluoro-, lithium	Х				
21324-40-3					
Nickel	Х	Х	X	X	X
7440-02-0					
1,3-Propane sultone	Х	Х	X	X	X
1120-71-4					



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Propylene imine	X	X	X	X	X
75-55-8					

16. OTHER INFORMATION

NFPA Health hazards 1 Flammability 0 Instability 0 Physical and Chemical

Properties -

HMIS Health hazards 0 Flammability 0 Physical hazards 0 Personal Protection X

Prepared By Product Stewardship

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Disclaimer

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End of Safety Data Sheet

