

Global Brazing Solutions\*

Safety Data Sheet according to the Hazardous Products Regulation (February 11, 2015) Date of issue: 29 November 2017 Revision date: 17 October 2017 Version: 2.0

1.1       Product latentifier         Product latentifier       Mixture         Frade name       Mixture         Product good       Mixture </th <th>SECTION 1: Identification</th> <th></th>	SECTION 1: Identification	
Product form : Minitum   Trade name : HANDY ONE 94.8 22   Product code : A0000203   Product code : A0000203   Product code : Alloys for brazing/soldering and other metallurgical processes   1.2. Recommended use and restrictions on use   Recommended use : Alloys for brazing/soldering and other metallurgical processes   1.3. Suppler   Lucas-Mihaupi Torrot   2.0. Calinging with the USA and Canada: 1-800-424-9300   CM. SDSIndo Blucasamilhaupt com - www.lucasamilhaupt.com   1.4. Emergency talephone number   Constitication (GHS CA)   Substances and Motures which, in contact with water, emit flammable gases, Category 2   Matter Statements : see section 18   2.1. Cales Iffication (GHS CA)   Substances and Motures which, in contact with water, emit flammable gases, Category 2   Mist CA Label dements, including precautionary statements   CMS CA Label dements, including precautionary statements   CMS CA Label dements, including precautionary statements   CMS CA Label dements, including precautionary statements   CHS CA Label dements, including precautionary statements (GHS CA)   Suppland uord (GHS CA)   Suppland uord (GHS CA)   Fecautionary statements (GHS CA)   Precautionary statements (GHS CA)   Precautionary statem		
Take name I. HANDY ONE® AL 822   Product goop I. Take product <b>12. Recommended use and restrictions on use</b> Recommended use I. Alloys for brazing/soldering and other metallurgical processes <b>13. Supple</b> Luces-Milhage Toronto   200 Calingoive Drive   201 Calingoive Drive   201 Calingoive Drive <b>14. Emergency telephone number 15. Supple 15. Supple 16. Emergency telephone number 17. Clossification of the substance or mixture 18. Substances and Mixtures which, in contact with water, emit flarmnable gases, Category 2 Hazard blog benents, including precautionary statements   <b>18. Substances and Mixtures which, in contact with water, emit flarmnable gases, Category 2 Hazard blog benents, including precautionary statements   <b>19. Clossified OHS 19. Clossified OHS 19. Clossified OHS 19. Clossified Delements, including precautionary statements 19. Clossified Delements, including precaut</b></b></b>		· Mixture
Product code       : A0000203         Product group       : Tade product         12.0       Recommended use and restrictions on use         Recommended use       : Alloys for brazing/soldering and other metallurgical processes         13.0       Suppler         Luess-Mihaupi Torotho       Suppler         200 Calingry work Drive       WW Locasmithaupt Com         WW SG1 Recode- Conade       : CHEMTREC Within the USA and Canada: 1-800-424-8300         SECTION 2: Hazard identification       :         2.1       Classification of the substance or mixture         Classification of the substance or mixture       :         Substances and Mixtures which, in contact with water, emit flammable gases, Category 2       H281         Full ext of H statements : see section 16       :       :         2.2       GHS Cabiel dements, including precautionary statements       :         Field ext of H statements : cee section 16       :       :         2.3       On cati allow ordinat with water releases flammable gases. :       :         Field in the	Trade name	
1.2. Recommended use and restrictions on use         Recommended use       : Alloys for brazing/soldering and other metallurgical processes         1.3. Supplier         Luces-Mihaugh Toronto 200 Carlingview Drive MWS 501 Rexduels - Canada T-11 (H16) 675-1860         LM. SDSinfo Bluceamilhaupt com - www.luceamilhaupt com         1.4. Emergency talephone number         Emergency rumber       : CHEMTREC Within the USA and Canada: 1-800-424-9300         SUSTANCE Hazard identification         Classification of the substance or mixture         Classification of the substance or mixture         Classification (GHS CA)         Substances and Mixtures which, in contact with water, emit flammable gases, Category 2 H220       H221 H300         Contoxity (ran), Category 4 H322         Hazardous to the aquatic environment — Acute Hazard, Category 1 H300         Contoxitible Dus         Event to contact with water, emit flammable gases, Category 2 H320         List of H statements : see section 16         2.2. OHS Label elements, including precautionary statements         CHS CA labeling         Hazard bit the quadia environment — Katter Hazard : in contact with water releases flammable gases. H330 - Harmful if swallowed. H300 - Very took to aquatic life.         Precautionary statements (GHS CA)       : Parafe         E Parafe H32 - Harmful if swallowed. H330 - Parafer H32 - Handeurder integin gas. Protect from misture. P	Product code	
1.2. Recommended use and restrictions on use         Recommended use       : Alloys for brazing/soldering and other metallurgical processes         1.3. Supplier         Luces-Mihaugh Toronto 200 Carlingview Drive MWS 501 Rexduels - Canada T-11 (H16) 675-1860         LM. SDSinfo Bluceamilhaupt com - www.luceamilhaupt com         1.4. Emergency talephone number         Emergency rumber       : CHEMTREC Within the USA and Canada: 1-800-424-9300         SUSTANCE Hazard identification         Classification of the substance or mixture         Classification of the substance or mixture         Classification (GHS CA)         Substances and Mixtures which, in contact with water, emit flammable gases, Category 2 H220       H221 H300         Contoxity (ran), Category 4 H322         Hazardous to the aquatic environment — Acute Hazard, Category 1 H300         Contoxitible Dus         Event to contact with water, emit flammable gases, Category 2 H320         List of H statements : see section 16         2.2. OHS Label elements, including precautionary statements         CHS CA labeling         Hazard bit the quadia environment — Katter Hazard : in contact with water releases flammable gases. H330 - Harmful if swallowed. H300 - Very took to aquatic life.         Precautionary statements (GHS CA)       : Parafe         E Parafe H32 - Harmful if swallowed. H330 - Parafer H32 - Handeurder integin gas. Protect from misture. P		: Trade product
Recommended use       : Alloys for brazing/soldering and other metallurgical processes         1.1.       Suppler         Lucas-Milhaugh Toroni         200 Carling/view Drive         View Off Nexcline - Canada         1.1.1       Emergency tolephone number         Emergency Turl (10) for 51000         Emergency Turl (10) for 51000         2.1.1       Classification of the substance or mixture         Classification (OHS CA)         Substances and Mixtures which, in contact with water, emit flammable gases, Category 2       1/261         Acute toxicity (oral), Category 4       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H302         Hazardous to the reverses       H304         Hazardous to the reverses       H304         Hazardous to the reverseses flammable gases. H304       H3		
<ul> <li>1.3. Supplier</li> <li>Lucas-Milhaupt Toronto 200 Carlingroup Drive 200 Carling</li></ul>		
Lucae-Milhaupt Toronto 290 Carlingview Drive WWS 951 Rexcutescesminaupt.com - www.lucasmilhaupt.com <b>1.4. Emergency telephone number</b> Emergency number : CHEMTREC Within the USA and Canada: 1-800-424-9300 <b>SECTION 2: Hazard Identification</b> <b>2.1. Classification of the substance or mixture</b> <b>Classification of the substance or mixture</b> <b>Classification of the substance or mixture</b> <b>Classification (GHS CA)</b> Substances and Mixtures which, in contact with water, emit flammable gases, Category 2 H302 H302 H302 H302 H304 H304 H304 H304 H304 H304 H304 H304 H304 H304 H304 H304 H305 H304 H306 H306 H306 H306 H307 H307 H307 H307 H308 H30		· · ·····)····························
290 Carlingview Drive         MW SG1 Rexcisele - Canada         14.1 Emergency values and inhaust com - www.lucasmilhaupt.com         14.1 Estisting & United Statements         Emergency runnber       c. CHEMTREC Within the USA and Canada: 1-800-424-9300         SECTION 2: Hazard identification         21.1 Classification of the substance or mixture         Classification (CHS CA)         Subtances and Mutures which, in contact with water, emit flammable gases, Category 2       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H400         Combustble Dust       H400         Full test of H statements : see section 16       2.2.         2.2.       CHS Label elements, including precautionary statements         GHS CA labelling       Exact statements (GHS CA)         Hazard statements (GHS CA)       : May form combustible dust concentrations in air H281 in contact with water releases flammable gases. H400 · Very toxic to aquatic life.         Precautionary statements (GHS CA)       : P223 - Don allow contact with water. P231 + P232 - Handle under iner gas. Protect from moisture. P246 · Wash hands, foreamis and face throcologity after handing. P270 - Don te allow contact with water. P231 + P232 - Handle under iner gas. Protect from moisture. P246 · Wash hands, foreamis and face throcologity after handing. P270 - Don te allow contact with water. P231 + P232 - Handle under iner gas. Protect from moisture. P246 · Wash hands, foreas and face throcologithy after handing. P270 - Don te allow conta		
Emergency number : CHEMTREC Within the USA and Canada: 1-800-424-9300 SECTION 2: Hazard identification 2.1. Classification of the substance or mixture Classification (GHS CA) Substances and Mixtures which, in contact with water, emit flammable gases, Category 2 Hazardous to the aquatic environment — Acute Hazard, Category 1 Hato Combustible Dust Full text of H statements : see section 16 2.2. CHS Label elements, including precautionary statements CHS CA labelling Hazard pictograms (GHS CA) Signal word (GHS CA) Hazard statements (GHS CA) Full text of H statements : CHS CA) Character Combustible dust concentrations in air H2E1 - In contact with water releases flammable gases. Hazard statements (GHS CA) Full text of H statements (GHS CA) Full text of H statements (GHS CA) Character Combustible dust concentrations in air H2E1 - In contact with water releases flammable gases. H302 - Harmful if swallowed. H400 - Very toxic to aquatic life. Precautionary statements (GHS CA) Character CHS CA) Full text of the analysis of the statement. P231-P232 - Handle under inert gas. Protect from moisture. P244 - Wash hands, forearms and face thoroughly after handing. P270 - Do not etal, drink or smoke when using this product. P273 - Avoid releases the environment. P280 - Wash protective clothing/eye protection/face protection. P301-P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell, P302-P336-P334 - IF Con SKIN; Brush off losse particles from skin. Immerse in cool water or wrap in wet bandages. P303 - P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell, P304-P312 - IF SWALLOWED: Call a POISON correct with state collection point, in accordance with local, regional, national and/or international regulation 2.3. Other hazard	290 Carlingview Drive M9W 5G1 Rexdale - Canada T +1 (416) 675-1860	asmilhaupt.com
Emergency number : CHEMTREC Within the USA and Canada: 1-800-424-9300 Section 21 Academic Section 21 Academic Section 22 H281 Acute toxicity (oral), Category 4 Hazardous to the aquatic environment — Acute Hazard, Category 1 Have toxicity (oral), Category 4 Hazardous to the aquatic environment — Acute Hazard, Category 1 Have toxicity (oral), Category 4 Hazardous to the aquatic environment — Acute Hazard, Category 1 Have toxicity (oral), Category 4 Hazardous to the aquatic environment — Acute Hazard, Category 1 Have to H statements : see section 16 <b>2.2. CHS Label elements, including precautionary statements</b> <b>CHS CA labelling</b> Hazard pictograms (GHS CA) Hazard statements (GHS CA) Hazard Stategory (CHS CA) Hazard S	1.4. Emergency telephone number	
<ul> <li>2.1. Classification of the substance or mixture</li> <li>Classification (GHS CA)</li> <li>Substances and Mixtures which, in contact with water, emit flammable gases, Category 2 H232 H232 H232 H232 H232 H232 H232 H2</li></ul>	Emergency number	: CHEMTREC Within the USA and Canada: 1-800-424-9300
<ul> <li>2.1. Classification of the substance or mixture</li> <li>Classification (GHS CA)</li> <li>Substances and Mixtures which, in contact with water, emit flammable gases, Category 2 H232 H232 H232 H232 H232 H232 H232 H2</li></ul>	SECTION 2: Hazard identification	
Substances and Mixtures which, in contact with water, emit flammable gases, Category 2       H261         Acute toxicity (oral), Category 4       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H400         Combustible Dust       H400         Full text of H statements : see section 16       Externormation of the section of the se		
Substances and Mixtures which, in contact with water, emit flammable gases, Category 2       H261         Acute toxicity (oral), Category 4       H302         Hazardous to the aquatic environment — Acute Hazard, Category 1       H400         Combustible Dust       H400         Full text of H statements : see section 16       Externormation of the section of the se	Classification (GHS CA)	
2.2. CHS Label elements, including precautionary statements         GHS CA labelling         Hazard pictograms (GHS CA)       : i i i i i i i i i i i i i i i i i i i	Acute toxicity (oral), Category 4	H302
GHS CA labelling         Hazard pictograms (GHS CA)         Signal word (GHS CA)         Hazard statements (GHS CA)         Hazard statements (GHS CA)         Hazard statements (GHS CA)         Precautionary statements (GHS CA)	Full text of H statements : see section 16	
Hazard pictograms (GHS CA)       :       Image: Ima	2.2. GHS Label elements, including	precautionary statements
Signal word (GHS CA)       : Danger         Hazard statements (GHS CA)       : May form combustible dust concentrations in air H261 - In contact with water releases flammable gases. H302 - Harmful if swallowed. H400 - Very toxic to aquatic life.         Precautionary statements (GHS CA)       : P223 - Do not allow contact with water. P231+P232 - Handle under inert gas. Protect from moisture. P231+P232 - Handle under inert gas. Protect from moisture. P240 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. P302+P335+P334 - IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages. P300 - Rinse mouth. P304-P404 - Store in a dry place. Store in a closed container. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation         2.3.       Other hazards	GHS CA labelling	
Hazard statements (GHS CA)       : May form combustible dust concentrations in air H261 - In contact with water releases flammable gases. H302 - Harmful if swallowed. H400 - Very toxic to aquatic life.         Precautionary statements (GHS CA)       : P223 - Do not allow contact with water. P231+P232 - Handle under inert gas. Protect from moisture. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. P302+P335+P334 - IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages. P330 - Rinse mouth. P331 - Collect spillage. P402+P404 - Store in a dry place. Store in a closed container. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation         2.3.       Other hazards	Hazard pictograms (GHS CA)	
<ul> <li>H261 - In contact with water releases flammable gases.</li> <li>H302 - Harmful if swallowed.</li> <li>H400 - Very toxic to aquatic life.</li> <li>Precautionary statements (GHS CA)</li> <li>P223 - Do not allow contact with water.</li> <li>P231+P232 - Handle under inert gas. Protect from moisture.</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P273 - Avoid release to the environment.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.</li> <li>P302+P335+P334 - IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages.</li> <li>P330 - Rinse mouth.</li> <li>P370+P378 - In case of fire: Use media other than water to extinguish.</li> <li>P391 - Collect spillage.</li> <li>P402+P404 - Store in a dry place. Store in a closed container.</li> <li>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation</li> </ul>	Signal word (GHS CA)	: Danger
<ul> <li>P231+P232 - Handle under inert gas. Protect from moisture.</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P273 - Avoid release to the environment.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.</li> <li>P302+P335+P334 - IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages.</li> <li>P330 - Rinse mouth.</li> <li>P370+P378 - In case of fire: Use media other than water to extinguish.</li> <li>P391 - Collect spillage.</li> <li>P402+P404 - Store in a dry place. Store in a closed container.</li> <li>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation</li> </ul>	Hazard statements (GHS CA)	H261 - In contact with water releases flammable gases. H302 - Harmful if swallowed.
	Precautionary statements (GHS CA)	<ul> <li>P231+P232 - Handle under inert gas. Protect from moisture.</li> <li>P264 - Wash hands, forearms and face thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P273 - Avoid release to the environment.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.</li> <li>P302+P335+P334 - IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages.</li> <li>P330 - Rinse mouth.</li> <li>P370+P378 - In case of fire: Use media other than water to extinguish.</li> <li>P391 - Collect spillage.</li> <li>P402+P404 - Store in a dry place. Store in a closed container.</li> <li>P501 - Dispose of contents/container to hazardous or special waste collection point, in</li> </ul>
No additional information available	2.3. Other hazards	
	No additional information available	

2.4. Unknown acute toxicity (GHS CA)

No data available

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### SECTION 3: Composition/information on ingredients

### 3.1. Substances

### Not applicable

# 3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Zinc	C.I. Pigment Black 16 / C.I. Pigment Metal 6 / Zinc (metallic) / Pigment Black 16	(CAS-No.) 7440-66-6	65 - 80	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400
Aluminum cesium fluoride	Aluminium cesium fluoride	(CAS-No.) 138577-01-2	10 - 25	Not classified
Aluminum	Aluminium / Aluminium metal / Aluminium, metal / Aluminum metal / Aluminum, elemental / Aluminum, metal / C.I. 77000 / CI 77000 / Aluminum (metal) / Aluminium powder (stabilised) / Aluminium powder (stabilised) / Aluminium powder / Pigment Metal 1 / Aluminum powder	(CAS-No.) 7429-90-5	1 - 20	Water-react. 2, H261 Comb. Dust

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation :	Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact :	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. Wash skin with plenty of water.
First-aid measures after eye contact :	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion :	Call a poison center or a doctor if you feel unwell. Rinse mouth.
First-aid measures general	Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effects	(acute and delayed)
Symptoms/effects after inhalation :	May cause respiratory irritation.
Symptoms/effects after eye contact :	Serious damage to eyes.
4.3. Immediate medical attention and speci	ial treatment, if necessary
Other medical advice or treatment :	Treat symptomatically.

SECT	ION 5: Fire-fighting measures	
5.1.	Suitable extinguishing media	
Suitabl	e extinguishing media	: Dry powder. Foam. Water spray.
5.2.	Unsuitable extinguishing media	
Unsuita	able extinguishing media	: Water.
5.3.	Specific hazards arising from the h	zardous product
Fire ha	zard	: Flammable solid. May form combustible dust concentrations in air.
5.4.	Special protective equipment and p	recautions for fire-fighters
Protect	ion during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION	ON 6: Accidental release meas	sures
6.1.	Personal precautions, protective eq	uipment and emergency procedures
No additi	onal information available	
6.2.	Methods and materials for containm	nent and cleaning up
For conta	ainment	: Collect spillage.
Methods	for cleaning up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters.
Other info	ormation	: Dispose of materials or solid residues at an authorized site.
6.3.	Reference to other sections	

For further information refer to section 8: "Exposure controls/personal protection"

### Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Handle under inert gas. Protect from moisture. Do not allow contact with water. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Avoid dust formation.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, includin	g any incompatibilities
Technical measures	: Ground/bond container and receiving equipment.
Storage conditions	: Protect from moisture. Store in a dry place. Store in a closed container. Store in a well- ventilated place. Keep cool. Protect from sunlight. Keep away from ignition sources. Store locked up. Keep container tightly closed.

### SECTION 8: Exposure controls/personal protection

8.1. Control parameters	3.1. Control parameters		
Aluminum (7429-90-5)	Aluminum (7429-90-5)		
USA - ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (respirable particulate matter)	
USA - OSHA	USA - OSHA OSHA PEL (TWA) (mg/m <sup>3</sup> ) 15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction)		
Canada (Quebec)	VEMP (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>	
Alberta	OEL TWA (mg/m <sup>3</sup> )	10 mg/m³ (dust)	
British Columbia	OEL TWA (mg/m³)	1 mg/m <sup>3</sup> (respirable)	
Manitoba	Manitoba         OEL TWA (mg/m³)         1 mg/m³ (respirable particulate matter)		
New Brunswick         OEL TWA (mg/m³)         10 mg/m³ (metal dust)			
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (respirable particulate matter)	
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (respirable particulate matter)	
Nunavut	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> (metal-dust)	
Nunavut	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (metal-dust)	
Northwest Territories OEL STEL (mg/m <sup>3</sup> ) 20 mg/m <sup>3</sup> (metal-dust)			
Northwest Territories	OEL TWA (mg/m³)	10 mg/m <sup>3</sup> (metal-dust)	
Ontario	Ontario OEL TWA (mg/m <sup>3</sup> ) 1 mg/m <sup>3</sup> (respirable)		
Prince Edward Island	Prince Edward Island OEL TWA (mg/m <sup>3</sup> ) 1 mg/m <sup>3</sup> (respirable particulate matter)		
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> (dust)	
Saskatchewan	Saskatchewan OEL TWA (mg/m <sup>3</sup> ) 10 mg/m <sup>3</sup> (dust)		
Zinc (7440-66-6)	Zinc (7440-66-6)		
USA - ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m³ (as ZnO)	
8.2. Appropriate engine	ering controls	•	

Appropriate engineering controls

: Ensure good ventilation of the work station.: Avoid release to the environment.

Environmental exposure controls : Avoid release to the envir 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

#### **Respiratory protection:**

[In case of inadequate ventilation] wear respiratory protection.

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

SECTION 9: Physical and chemical	properties
9.1. Information on basic physical and o	
Physical state	: Solid
Appearance	: No data available
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
На	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: In contact with water releases flammable gases, Flammable solid.
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative density	: Not applicable
Solubility	: No data available
Log Pow	: No data available
Explosive limits	: Not applicable

# 9.2. Other information No additional information available

SECTION 10: Stability and reactiv	ity
10.1. Reactivity	
Reactivity	: Flammable solid.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: In contact with water releases flammable gases.
Conditions to avoid	: Water, humidity. Heat. No flames, no sparks. Eliminate all sources of ignition. Avoid contact with hot surfaces. Avoid dust formation.
Incompatible materials	: Acids.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

<b>SECTION 11: Toxicological informat</b>	ion
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Oral: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
ATE CA (oral)	787.5 mg/kg bodyweight
Zinc (7440-66-6)	
LD50 oral rat	630 mg/kg
ATE CA (oral)	630 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
2 May 2019	EN (English) 4,

# Safety Data Sheet

ccording to the Hazardous Products Regulation (Fe	ebruary 11, 2015)
	: Not classified
STOT-repeated exposure	
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after eye contact	: Serious damage to eyes.
SECTION 12: Ecological informat	ion
12.1. Toxicity	
Ecology - general	: Very toxic to aquatic life.
Acute aquatic toxicity	: Very toxic to aquatic life.
Chronic aquatic toxicity	: Not classified
Zinc (7440-66-6)	
EC50 96h algae (1)	0.11 - 0.271 mg/l (Species: Pseudokirchneriella subcapitata [static])
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Other adverse effects	
Ozone	: Not classified
SECTION 13: Disposal considera	tions
13.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport informati	on
14.1. Basic shipping description	
In accordance with TDG	
Transportation of Dangerous Goods Not regulated for transport	
14.2. Transport information/DOT	
Department of Transport	
Not regulated for transport	
14.3. Air and sea transport	
MDG	
Not regulated for transport	
ΙΛΤΛ	
Not regulated for transport	tion
Not regulated for transport SECTION 15: Regulatory informa	tion
Not regulated for transport SECTION 15: Regulatory informa	
Not regulated for transport SECTION 15: Regulatory informations	)
Not regulated for transport SECTION 15: Regulatory information 15.1. National regulations Aluminum cesium fluoride (138577-01-2) Listed on the Canadian NDSL (Non-Domesian	)
Not regulated for transport SECTION 15: Regulatory informa 15.1. National regulations Aluminum cesium fluoride (138577-01-2)	) stic Substances List)
Listed on the Canadian NDSL (Non-Domes Aluminum (7429-90-5)	) stic Substances List)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Aluminum cesium fluoride (13	3577-01-2)
	ventory of Chemical Substances) A (Toxic Substances Control Act) inventory
Aluminum (7429-90-5)	
Listed on IECSC (Inventory of E Listed on the EEC inventory EIN Listed on the Korean ECL (Exis Listed on NZIOC (New Zealand Listed on PICCS (Philippines In Listed on the United States TSC	nventory of Chemicals) entory of Chemicals and Chemical Substances) A (Toxic Substances Control Act) inventory al Inventory of Chemical Substances)
Zinc (7440-66-6)	
Listed on IECSC (Inventory of E Listed on the EEC inventory EIN Listed on the Korean ECL (Exist Listed on NZIoC (New Zealand Listed on PICCS (Philippines In Listed on the United States TSC	Inventory of Chemicals) entory of Chemicals and Chemical Substances) A (Toxic Substances Control Act) inventory al Inventory of Chemical Substances)
SECTION 16: Other inform	nation

Date of issue	
Revision	date

: 29 November 2017 : 17 October 2017

### Full text of H-statements:

H261	In contact with water releases flammable gases.
H302	Harmful if swallowed.
H400	Very toxic to aquatic life.

SDS Canada (GHS)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.