SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product:	**Flamefighter ABE Extinguisher**
Other means of Identification:	8409 Flamefighter 0.3kg ABE Dry Powder 8425 Flamefighter 1kg ABE Dry Powder 8411 Flamefighter 1.5kg ABE Dry Powder 8412 Flamefighter 2kg ABE Dry Powder 8413 Flamefighter 2.5kg ABE Dry Powder 8414 Flamefighter 4.5kg ABE Dry Powder 8415 Flamefighter 6kg ABE Dry Powder 8416 Flamefighter 9kg ABE Dry Powder
Product Use:	Fire Extinguishing Agent
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	**PSL Fire & Safety**
Address:	10 Akatea Rd, Glendene Auckland 0602
Telephone:	+64 9 818 8048
Fax:	+64 9 818 4484
Email:	sales@pslfireandsafety.co.nz
Emergency No:	**0800 764 766 (National Poison Centre)**
Date of SDS:	20 March 2019

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No: Fire Fighting Chemicals – HSR002573

Pictograms

Irritant

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
Gases under pressure - compressed gas.	-	-	-

6.3A	H315	Causes skin irritation.	Skin Irrit. 2
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
9.1D	H401	Toxic to aquatic life.	Aquatic Acute 2

Prevention Code	Prevention Statement
P103	Read label before use.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear personal protective equipment as detailed in Section 8.

Response Code	Response Statement
P362	Take off contaminated clothing and wash before re-use.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Mono ammonium phosphate	20-90	7722-76-1
Ammonium Sulfate	5-60	7783-20-2
Silicon dioxide	<0.3	112926-00-8
Nitrogen	n/a, GAS	7727-37-9

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.

If on Skin — Remove contaminated clothing and wash before reuse. Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.

If Swallowed — Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.

If Inhaled — Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion: Not applicable
Inhalation: Not applicable
Skin: Causes skin irritation
Eye: Causes severe eye irritation
Chronic: Not applicable

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from decomposition products	Ammonia and / or phosphorous oxides can be evolved at very high temperatures. Exposure to fire may cause containers to rupture / explode.
Suitable Extinguishing media	Product is an extinguishing agent, use appropriate fire extinguisher for surrounding environment.
Precautions for firefighters and special protective clothing	Fire fighters should wear self-contained breathing apparatus (SCBA) and full protective clothing to prevent exposure to vapours, fumes or products of combustion. Avoid eye and skin contact. In case of fire the product may be violently or explosively reactive. If safe to do so, remove containers from path of fire. Keep containers and fire-exposed surfaces cool with water spray. This product should be prevented from entering drains and watercourses.
HAZCHEM CODE	**None Allocated**

Section 6. Accidental Release Measures

Avoid contact with eyes and skin. Wear PPE as detailed in Section 8. Evacuate all unnecessary personnel.
If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

If possible contain the spill. Sweep or vacuum up contents and place in sealed labelled container for disposal. Dispose of waste according to the applicable local and national regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.
- Avoid inhalation of dust and skin or eye contact.
- Use only in a well ventilated area.
- Keep containers sealed when not in use.
- Prevent the build-up of dust in the work atmosphere.
- Avoid release to the environment.
- Wear personal protective equipment as detailed in Section 8.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Always store in dry, cool area out of direct sunlight in original container with lid tightly closed.
- Keep containers closed when not in use.
- Do not allow any part of a cylinder to be exposed above 50^0C.
- Storage areas should be kept clean and free from flammable materials.
- Ensure that containers are properly vented to prevent build up of pressure.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³
Nitrogen [7727-37-9]	Simple asphyxiant			

Workplace Exposure Standard – Time Weighted Average (WES-TWA).The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

Engineering Controls

Use with good general ventilation. If solids / dusts are produced, local exhaust ventilation should be used. Systems under pressure should be regularly checked for leakages.

Personal Protection Equipment

Eyes	Use approved safety goggles or face shield. Avoid wearing contact lenses.
Skin	Wear chemical resistant gloves.
Respiratory	Wear a dust mask.

Section 9 Physical and Chemical Properties

Appearance	Powder (solid)
Colour	Blue
Odour	None
Odour Threshold	Odour threshold is subjective and inadequate to warn for over exposure.
pH	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Density	Not available
Specific Gravity	Not available
Solubility	Not available
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity, kinematic	Not available
Particle Characteristics	Not available
Other information	Stability in temperature - 45 ^{O}C ~ +60 ^{O}C

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Extremes of temperature and direct sunlight.
Incompatible Materials	None
Hazardous Decomposition Products	Ammonia and or Phosphorous oxides can be evolved at very high temperatures.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not an expected route of entry, however, ingestion may cause irritation.
Dermal	Not applicable.
Inhalation	Not an adverse effect however, treat as mineral dust, Irritant to the respiratory tract. Transient cough and shortness of breath may occur.
Eye	Causes serious eye irritation.
Skin	Causes skin irritation.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Chronic fibrosis of the lung, pneumoconiosis.

Section 12. Ecotoxicological Information

HSNO Classes: 9.1D = Toxic to aquatic life.

Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	Prevent these material entering waterways, drains and sewers.

Ammonium Sulfate (Cas No 7783-20-2)

Classification route species:

(fish)

Classification key study:

SPECIES: Catla catla
TYPE OF EXPOSURE:
DURATION: 96 hr
ENDPOINT: LC50
VALUE: 48 mg/l
REFERENCE SOURCE: BASF AG Ludwigshafen (36) Konar S.K. and Sarkar S.K.: Geobis 10, 6-9, (1983). [IUCLID 2000]

Bioccumulative: No
Rapidly Degradable: Yes

Classification route species:
(crustacean)

Classification key study:
SPECIES: Crangon crangon (Crustacea)
TYPE OF EXPOSURE:
DURATION: 96 hr
ENDPOINT: EC50
VALUE: 81 - 130 mg/l
REFERENCE SOURCE: BASF AG Ludwigshafen Salzwasser (47) Franklin,F.L.: Min. Agric., Fish. Food, Tech. Rep. No.61, Lowestoft, UK, 8 p., (1980). [IUCLID 2000]

Bioccumulative: No
Rapidly Degradable: Yes

Section 13. Disposal Considerations

Disposal Method: Triple rinse and dispose of according to Local regulations.

Precautions or methods to avoid: Do not allow to enter waterways.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Road, Rail, Sea and Air Transport

UN No	1044
Class - Primary	2.2
Packing Group	N/A
Proper Shipping Name	**FIRE EXTINGUISHERS WITH COMPRESSED OR LIQUEFIED GAS**
Marine Pollutant	No
Special Provisions	If the product's individual container is below 500ml, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

This substance is classified as hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: Fire Fighting Chemicals – HSR002573

HSNO Classification: 6.3A, 6.4A, 9.1D

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	Not required
Emergency Response Plan	Not required
Secondary Containment	Not required

Restriction of Use	Only use for the intended purpose.

Section 16 Other Information

Glossary

EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact PSL Fire & Safety, if further information is required.

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