BlastX 108 SDS - Rev. #2

Safety Data Sheet BlastX 108 **Revision 2** Date: 19 July 2019

1. IDENTIFICATION

BlastX 108 Flash Rust Inhibitor / Salt Remover Additive **Product Name**

Other Names

Uses Inhibit Flash Rust Formation & Remove Chloride Salts from metal surfaces

Chemical Family No Data Available Chemical Formula Proprietary Chemical Name BlastX 108

Flash Rust Inhibitor / Salt Remover for Abrasive Blasting & Acid Bath Rust Removal **Product Description**

Contact Details of the Supplier of this Safety Data Sheet

Organisation Location Telephone

SOHO Technology Solutions Pty Ltd 9 Nowra Court. +61-421-400-969 Helensvale QLD 4212

Australia

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

Organisation	Location	Telephone
Poisons Information Centre	Westmead NSW	1800-251525 131126
Chemcal	Australia	1800-12 7 406 +64-4-9179888
Chemcal	Malaysia	+64-4-9179888
Chemcal	New Zealand	0800-243622 +64-4-9179888
National Poisons Centre	New Zealand	0800-764766
CHEMTREC	USA & Canada	1-800-424-9300 CN723420

+1-703-527-3887

2. HAZARD IDENTIFICATION

NOTE: Not hazardous when diluted to recommended dilution ratio's 25 parts water to 1 part BlastX 108 or higher. Information in this SDS below applies to uncliluted product.

Poisons Sohedule (Aust) 5

Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of

Chemicals (GHS)

Serious Eye Damage/Irritation - Category 2A **Hazard Categories**

Skin Corrosion/Irritation - Category 3

Specific Target Organ Toxicity (Single Exposure) - Category 3

Piotograms



Signal Word Warning

	H31 6	Causes mild skin irritation.
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
Prevention	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264	Wash contacted areas thoroughly after handling.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P312	Call a POISON CENTER or doctor/physician if you feel unwell.
	P332 + P313	If skin irritation occurs: Get medical advice/attention.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P362	Take off contaminated clothing and wash before reuse.
Storage	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
Disposal	P501	Dispose of contents/container in accordance with local / regional / national /
	Response	H319 H335 Prevention P261 P264 P271 P280 Response P302 + P352 P304 + P340 P305 + P351 + P338 P312 P332 + P313 P337 + P313 P362 Storage P403 + P233 P405

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous

international regulations.

Goods by Road & Rail (ADG Code)

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Health	6.1E	Substances that are acutely toxic -May be harmful, Aspiration hazard
	Hazards		

6.3B Substances that are mildly irritating to the skin

6.4A Substances that are irritating to the eye

Environmental **9.2D** Substances that are slightly harmful in the soil environment

Hazards

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Tris(2-hydroxyethyl)amine, Trolamine	No Data Available	102-71-6	>20 - <30%
2,2'-Iminodiethanol; Diethanolamine	No Data Available	111-42-2	< 1%
Other Non-Hazardous Ingredients	No Data Available	n/a	>20 - <80%

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed No emergency medical treatment necessary.

Eye Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and

continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing

and shoes while washing. Seek medical attention if irritation persists.

Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as

shoes, belts and watchbands.

Inhaled Remove victim from exposure to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give

oxygen.

Seek medical attention if effects occur.

Advice to Doctor If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure

should be directed at the control of symptoms and the clinical condition of the patient.

General advice: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific

personal protective equipment.

Medical Conditions Aggravated

by Exposure

No information available on medical conditions which are aggravated from exposure to this product.

5. FIRE FIGHTING MEASURES

General Measures If safe to do so, remove containers from the path of fire.

Flammability Conditions Slight fire hazard when exposed to heat or flame. May burn but does not ignite readily.

Extinguishing Media

In case of fire, appropriate extinguishing media include water spray/fog, dry chemical, carbon dioxide and alcohol-resistant foam. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Do not use direct water stream. May spread fire. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Consider the use of unmanned hose holders or monitor nozzles. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Fire and Explosion Hazard

Heating can cause expansion or decomposition of the material, which can lead to the containers exploding.

Hazardous Produots of Combustion Combustible liquid. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Incompatible with oxidizing agents, acids, nitrites, halogenated organic solvents, halogenated hydrocarbons, aluminium and sources of ignition. During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic or irritating including carbon monoxide, carbon dioxide and nitrogen oxides.

Heating above 60'C in temperature in the presence of aluminium can result in corrosion and generation of flammable hydrogen gas.

Special Fire Fighting

Instructions

Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

Personal Proteotive Equipment

Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit. Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas.

Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow

fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

Flash Point >179°C Closed Cup
Lower Explosion Limit No Data Available
Upper Explosion Limit No Data Available

Auto Ignition Temperature

>324°C

Hazohem Code

No Data Available

6. ACCIDENTAL RELEASE MEASURES

Personnel involved in the clean up should wear full protective clothing as listed in section 8. Evacuate all General Response Procedure

unnecessary personnel. Increase ventilation. Stop leak if safe to do so.

Avoid walking through spilled product as it may be slippery

Large spills: Dike area to contain spill. Pump into suitable and properly labeled containers. Small spills: Dilute with Clean Up Procedures

water. Recover spilled material if possible. Absorb with materials such as: Non-combustible material. Sand. Remove

with shovel. Collect in suitable and properly labeled containers. Contain spilled material if possible.

Containment Stop leak if safe to do so

Environmental Precautionary

Measures

Do not allow product to reach drains, sewers or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste

Evacuate all unnecessary personnel.

Personal Precautionary

Evacuation Criteria

Measures

Personnel involved in the clean up should wear full protective clothing as listed in section 8.

7. HANDLING AND STORAGE

Avoid contact with eyes. Wash thoroughly after handling. Do not use sodium nitrite or other nitrosating agents in Handling

formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting

in spontaneous combustion.

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for Storage

deficiencies such as damage or leaks. Storage temperature: 0 - 50 °C

Protect against physical damage. Store away from incompatible materials as listed in section 10. Protect from direct sunlight, moisture and static discharges. Avoid freezing. Store under an oxygen-free atmosphere. This product is classified as a 'C2' Combustible Liquid for the purpose of storage and handling in accordance with the requirements

Container Container type/packaging must comply with all applicable local legislation.

Store in original packaging as approved by manufacturer.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General The following exposure standard has been established for this product by The Australian Safety and Compensation

> Council (ASCC); Tris(2-hydroxyethyl)amine, cas 102-71-6 TWA = 5mg/m3 (Sen) 2,2'-Iminodiethanol; Diethanolamine cas 111-42-2 TWA 3ppm (13mg/m3) NOTE: The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. Sen: Sensitiser These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a

measure of relative toxicity.

No Data Available **Exposure Limits**

No information available on biological limit values for this product. **Biological Limits**

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local **Engineering Measures**

exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source,

preventing dispersion of it into the general work area.

Personal Proteotion Equipment RESPIRATOR: Wear an approved air-purifying respirator with organic vapour cartridge if engineering controls are

inadequate (AS1715/1716).

Wear Use safety glasses (with side shields) (AS1336/1337). FYFS: HANDS:

Wear nitrile or butyl rubber gloves (AS2161).

CLOTHING: Long-sleeved protective clothing and safety footwear (AS3765/2210).

Wash hands after use Work Hygienio Praotices

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid Appearance Liquid Odour Odourless

Colour Colourless to Straw

pН

No Data Available Vapour Pressure **Relative Vapour Density** No Data Available

Boiling Point 100 °C

Melting Point No Data Available

Freezing Point -5 °C

Solubility >1000g/L (20'C) 20°C

Specific Gravity

Flash Point >179 °C Closed Cup

>324 °C **Auto Ignition Temp** 0.2

Evaporation Rate No Data Available **Bulk Density** No Data Available

Corrosion Rate No Data Available **Decomposition Temperature** No Data Available Density No Data Available Specific Heat

Molecular Weight 149.19 g/mol **Net Propellant Weight** No Data Available **Ootanol Water Coefficient** -2.3 Measured Particle Size No Data Available **Partition Coefficient** No Data Available Saturated Vapour Concentration No Data Available Vapour Temperature No Data Available

Viscosity No Data Available Volatile Percent No Data Available **VOC Volume** No Data Available **Additional Characteristics** No Data Available **Potential for Dust Explosion** Product is a liquid

Fast or Intensely Burning

Charaoteristics

No Data Available

Flame Propagation or Burning

Rate of Solid Materials

No Data Available

Non-Flammables That Could Contribute Unusual Hazards to a

No Data Available

Properties That May Initiate or Contribute to Fire Intensity

No Data Available

Reactions That Release Gases

or Vapours

Fire

Heating >60'C in presence of aluminium may emit hydrogen gas

Release of Invisible Flammable

Vapours and Gases

No Data Available

10. STABILITY AND REACTIVITY

Chemical Stability Product is stable under normal conditions of use, storage and temperature.

Combustible liquid. Corrosive when wet.

Conditions to Avoid Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can

cause pressure in closed systems. Avoid moisture.

Materials to Avoid Avoid Avoid contact with: Nitrites. Strong acids. Strong oxidisers. Product may potentially react with various halogenated

organic solvents, resulting in temperature and/or pressure increases Corrosive when wet. Heating above 60°C in the presence of aluminium can result in corrosion and generation of flammable hydrogen gas. Avoid unintended contact

with: Halogenated hydrocarbons.

Hazardous Decomposition

Produots

During a fire, smoke may contain the original product in addition to combustion products of varying composition

which may be toxic or irritating including carbon monoxide, carbon dioxide and nitrogen oxides.

Heating above 60'C in temperature in the presence of aluminium can result in corrosion and generation of flammable hydrogen gas. Decomposition products depend upon temperature, air supply and the presence of other materials.

Hazardous Polymerisation Hazardous polymerization will not occur.

No dangerous reactions known under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

General Information Oral LD50 Rat: 6400mg/Kg Dermal LD50 Rabbit: >2000mg/Kg Repeated Dose Toxicity: Based on available data,

repeated exposures are not anticipated to cause significant adverse effects.

Carcinogenicity: Findings from a chronic skin painting study by NTP include liver tumors in mice. Mechanistic studies indicate that tumor formation is of questionable relevance to humans. Is not classified as a human carcinogen. Teratogenicity: Has been toxic to the fetus in laboratory animals at doses toxic to the mother. However, the relevance of this to humans is unknown. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use. In vitro genetic toxicity studies were negative. Based on physical properties, not

likely to be an aspiration hazard.

Eyelrritant May cause slight eye irritation. Corneal injury is unlikely.

Ingestion Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. Based on physical

properties, not likely to be an aspiration hazard.

SkinIrritant Prolonged skin contact is unlikely to result in absorption of harmful amounts. Brief contact is essentially non irritating

to skin. Repeated exposure may cause irritation, even a burn.

Sensitisation Skin contact may cause an allergic skin reaction in a small proportion of individuals. Did not cause allergic skin

reactions when tested in guinea pigs.

Aoute

Inhalation At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.

Based on the available data, respiratory irritation was not observed. No deaths occurred following exposure to a

saturated atmosphere.

Caroinogen Category No Data Available

12. ECOLOGICAL INFORMATION

Eootoxioity Fish Acute & Prolonged Toxicity: LC50, Pimephales promelas (fathead minnow), flow-through test/96hr: 11800mg/L

Aquatic Invertebrate Acute Toxicity: EC50, CeriodaphniaDubia (water flea)static test/48hr: Immobilization: 609.9mg/L Aquatic Plant Toxicity: ErC50, alga Scenedesmus sp,static test, Growth rate inhibition/72hr: 512mg/L Toxicity to Micro-organisms: EC50, OECD 209 Test; activated sludge/3hr: >1000mg/L Aquatic Invertebrates Chronic Toxicity Value: Water flea Daphnia magna, semi-static test/21d, number of offspring, NOEC: 16 mg/l, LOEC: 31 mg/L

Persistence/Degradability Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable

(reaches > 70% biodegradation in OECD test(s) for inherent biodegradability).

OECD Biodegradation Tests; Biodegradation Exposure Time Method 10 Day Window 97% 28 days OECD 301A Test PASS 89% 14 days OECD 302B Test Not Applicable

Mobility Mobility in soil: Potential for mobility in soil is very high (Koc between 0 and 50). Partition coefficient, soil organic

carbon/water (Koc): 10 Estimated. Henry's Law Constant (H): 1.91E-04 atm*m3/mole Measured

Environmental Fate Do NOT let product reach waterways, drains and sewers. Material is not classified as dangerous to aquatic

organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species). May increase pH of aquatic systems to > pH 10 which may be toxic to aquatic organisms. Partition coefficient, n-octanol/water (log

Pow): -2.3 Measured Bioconcentration Factor (BCF): < 3.9; Cyprinus carpio (Carp); Measured

Bioaccumulation Potential Bioaccumulation: Bioaccumulation potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): -2.3 at 25 °C Measured

Bioconcentration factor (BCF): < 3.9 Cyprinus carpio (Carp) 42 d Measured

Environmental Impaot No Data Available

13. DISPOSAL CONSIDERATIONS

General Information Dispose of in accordance with all local, state and federal regulations.

All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or

recycled/reconditioned at an approved facility.

Special Precautions for Land Fill Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name BLASTX 108

Class Not classified as dangerous goods

 Subsidiary Risk(s)UN
 No Data Available

 Number Hazohem
 No Data Available

 Paok Group
 No Data Available

 Special Provision
 No Data Available

Land Transport (Malaysia)

ADR

Proper Shipping Name BLASTX 108

Class

Not classified as dangerous goods

Subsidiary Risk(s)UNNo Data AvailableNumber HazohemNo Data AvailablePaok GroupNo Data AvailableSpecial ProvisionNo Data Available

Land Transport (New Zealand)

NZS5433

Proper Shipping Name BLASTX 108

Class

Not classified as dangerous goods

Subsidiary Risk(s)UNNo Data AvailableNumberNo Data AvailableHazohemNo Data AvailablePaok GroupNo Data AvailableSpecial ProvisionNo Data Available

Land Transport (United States of America)

US DOT

Proper Shipping Name BLASTX 108

Class

Not classified as dangerous goods

 Subsidiary Risk(s)UN
 No Data Available

 Number Hazohem
 No Data Available

 Pack Group
 No Data Available

 Special Provision
 No Data Available

Sea Transport

IMDG Code

Proper Shipping Name BLASTX 108

Class Not classified as dangerous goods

 Subsidiary Risk(s)
 No Data Available

 UN Number
 No Data Available

 Hazohem
 No Data Available

 Paok Group
 No Data Available

 Special Provision
 No Data Available

 EMS
 No Data Available

Marine Pollutant No

Air Transport

IATA DGR

Proper Shipping Name BLASTX 108

Class

Not classified as dangerous goods

Subsidiary Risk(s)

UN Number

No Data Available

Special Provision

No Data Available

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous

Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General Information No Data Available

Poisons Sohedule (Aust)

Inventory Listings

AUSTRALIA AICS: (Australian Inventory of Chemical Substances)

All components are listed on AICS, or are exempt

16. OTHER INFORMATION

Related Product Codes BX108-20CUBE, BX108-4JERRY

Revision 2

Revision Date 19 July 2019

Reason for Issue Updated SDS

Key/Legend < Less Than > Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

om² Square Centimetres
CO2 Carbon Dioxide

COD Chemical Oxygen Demand **deg C (°C)** Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Farenheit

g Grams

g/om^e Grams per Cubic Centimetre

g/I Grams per Litre

HSNO Hazardous Substance and New Organism **IDLH** Immediately Dangerous to Life and Health **immiscible** Liquids are insoluable in each other.

inHg Inch of Mercury inH2O Inch of Water

K Kelvin kg Kilogram

kg/m^e Kilograms per Cubic Metre

Ib Pound

LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours. **LD50** LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

Itr or L Litre

me Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours mg/kg Milligrams per Kilogram mg/m^a Milligrams per Cubic Metre

Miso or Misoible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH2O Millimetres of Water mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health NOHSC National Occupational Heath and Safety Commission OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion **ppm** Parts per Million

ppm/2h Parts per Million per 2 Hours ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

RCP Reciprocal Calculation Procedure STEL Short Term Exposure Limit TLV Threshold Limit Value

tne Tonne

TWA Time Weighted Average ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight