SAFETY DATA SHEET

BLAST POWER

WHYTES SPECIALISED EQUIPMENT

Catalogue number: **WH163**
Version No**: 2.1**
Issue date: **02/07/2021**
Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	BLAST POWER
Product code	WH163
Pack sizes	5L & 15L
Proper shipping name	CORROSIVE LIQUID, N.O.S. (contains potassium hydroxide)

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Tile and grout cleaner

Details of the manufacturer/importer

Registered company name	WHYTES SPECIALISED EQUIPMENT
Address	Unit 17/19 Cornhill Street, Ferntree Gully VIC 3156 Australia
Telephone	(03) 9758 6711
Website	www.carpetcleaningequipment.com.au
Email	sales@carpetcleaningequipment.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	6
GHS Classification	Serious Eye Damage Category 1, Skin Corrosion/Irritation Category 1B, Acute Toxicity (Oral) Category 4,
	Classification drawn from HCIS and ECHA C&L Inventory.

Label elements

Hazard pictograms	
SIGNAL WORD	**DANGER**

Hazard statement(s)

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage

Precautionary statement(s) Prevention

P260	Do not breathe mist / vapours / spray.
P264	Wash contaminated skin thoroughly after handling
P280	Wear protective gloves / protective clothing / eye protection / face. protection
P270	Do not eat drink or smoke when using this product

Precautionary statement(s) Response

P301+P310+P330+P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce. vomiting
P303+P310+P361+P353	IF ON SKIN (or hair): Immediately call a POISON CENTER or doctor. Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P310+P351+P338	IF IN EYES: Immediately call a POISON CENTER or doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.

Precautionary statement(s) Storage

P405	Store locked up

Precautionary statement(s) Disposal

P501	Dispose of contents / container in accordance with local regulations

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1310-58-3	10 <30	Potassium hydroxide
1310-73-2	<10	Sodium hydroxide
10213-79-3	<10	Sodium metasilicate pentahydrate
141-43-5	<10	Monoethanolamine
7320-34-5	<10	Potassium pyrophosphate
Trade secret	<10	Proprietary ingredient 1
Trade secret	<10	Proprietary ingredient 2

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor.
Inhalation	If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay.
Ingestion	For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do **NOT** induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

Indication of any immediate medical attention and special treatment needed

For acute or short-term repeated exposures to highly alkaline materials:

- Respiratory stress is uncommon but present occasionally because of soft tissue edema.
- Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.
- Oxygen is given as indicated.
- The presence of shock suggests perforation and mandates an intravenous line and fluid administration.
- Damage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue.
- Alkalis continue to cause damage after exposure.

INGESTION:

- Milk and water are the preferred diluents.
- No more than 2 glasses of water should be given to an adult.
- Neutralising agents should never be given since exothermic heat reaction may compound injury.
- Catharsis and emesis are absolutely contra-indicated.
- Activated charcoal does not absorb alkali.
- Gastric lavage should not be used.

EYE INJURY

- Injury should be irrigated for 20-30 minutes.
- Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media	Water spray or fog. Foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide

Special hazards arising from the substrate or mixture

Fire incompatibility	None known

Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use firefighting procedures suitable for surrounding area. **Do not** approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	Non combustible. Not considered a significant fire risk, however containers may burn. May emit corrosive fumes.
HAZCHEM	2X

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Flush away with copious amounts of water.
Major Spills	Wear full body protective clothing with breathing apparatus. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labeled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle.

	Personal protective equipment advice is contained in Section 8 of this SDS

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. **WARNING:** To avoid violent reaction, **ALWAYS** add material to water and **NEVER** water to material. Avoid contact with incompatible materials. When handling, **DO NOT** eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling.
Other information	Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks Observe manufacturer's storage and handling recommendations contained within this SDS. **DO NOT** store near acids or oxidising agents. No smoking, naked lights, heat or ignition sources.

Conditions for safe storage, including any incompatibilities

Suitable container	Plastic pail. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Avoid contact with acids and oxidising agents

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	potassium hydroxide	Potassium hydroxide	Not Available	Not Available	2 mg/m3	Not Available
Australia Exposure Standards	monoethanolamine	Ethanolamine	3 ppm / 7.5 mg/m3	15 mg/m3 / 6 ppm	Not Available	Not Available
Australia Exposure Standards	sodium hydroxide	caustic soda	Not Available	Not Available	2 mg/m3	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
potassium hydroxide	Potassium hydroxide	0.18 mg/m3	2 mg/m3	54 mg/m3
monoethanolamine	Ethanolamine	6 ppm	170 ppm	1000 ppm
sodium metasilicate, pentahydrate	sodium metasilicate, pentahydrate	6.6 mg/m3	73 mg/m3	440 mg/m3
potassium pyrophosphate	Tetrapotassium diphosphorate	61 mg/m3	680 mg/m3	1,200 mg/m3
sodium hydroxide	caustic soda	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
potassium hydroxide	Not Available	Not Available
monoethanolamine	30 ppm	Not Available
sodium metasilicate, pentahydrate	Not Available	Not Available
potassium pyrophosphate	Not Available	Not Available
sodium hydroxide	10 mg/m3	Not Available

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Safety glasses with unperforated side shields may be used where continuous eye protection is desirable. Chemical goggles .whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted. Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afforded face protection. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.
Skin protection	See Hand protection below
Hands/feet protection	Elbow length PVC gloves When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
Body protection	See Other protection below
Other protection	Overalls. PVC Apron. PVC protective suit may be required if exposure severe. Eyewash unit. Ensure there is ready access to a safety shower.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear dark tan liquid

Physical state	Liquid	**Relative density (Water = 1)**	1.22
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	14	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Applicable	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	Not Available	**Taste**	Not Available

Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Available	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Applicable	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit(%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water (g/L)	Miscible	**pH as a solution (1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
Ingestion	Ingestion of alkaline corrosives may produce burns around the mouth, ulcerations and swellings of the mucous membranes, profuse saliva production, with an inability to speak or swallow. Both the oesophagus and stomach may experience burning pain; vomiting and diarrhea may follow. The material has **NOT** been classified by EC Directives or other classification systems as 'harmful by ingestion'. This is because of the lack of corroborating animal or human evidence.
Skin Contact	The material can produce severe chemical burns following direct contact with the s k i n . Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions. Potassium hydroxide burns are not immediately painful; onset of pain may be delayed minutes or hours; thus care should be taken to avoid contamination of gloves and boots.
Eye	If applied to the eyes, this material causes severe eye damage. Direct eye contact with corrosive bases can cause pain and burns. There may be swelling, epithelium destruction, clouding of the cornea and inflammation of the iris. Mild cases often resolve; severe cases can be prolonged with complications such as persistent swelling, scarring, permanent cloudiness, bulging of the eye, cataracts, eyelids glued to the eyeball and blindness.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue.

Toxicological effects of ingredients

Acute toxicity	potassium hydroxide	Oral LD50 (rat) 273 mg/kg
	monoethanolamine	Oral LD50 (rat) 1515 mg/kg Dermal LD50 (rabbit) 2504 mg/kg
	sodium metasilicate, pentahydrate	Oral LD50 (rat) 847 mg/kg
	potassium pyrophosphate	Oral LD50 (rabbit) >1000 mg/kg Dermal LD50 (rabbit) >4640 mg/kg
	sodium hydroxide	No data available
	proprietary ingredient 1	Oral LD50 (rat) 16800 mg/kg
	proprietary ingredient 2	Oral LD50 (rat) 2546 mg/kg Dermal LD50 (rat) 1844 mg/kg
Skin corrosion/irritation	potassium hydroxide	Severe irritant (rabbit)
	monoethanolamine	Corrosive
	sodium metasilicate, pentahydrate	Corrosive. Causes skin burns.
	potassium pyrophosphate	Irritating (non-specific severity)
	sodium hydroxide	Corrosive. Causes skin burns.
	proprietary ingredient 1	Irritating
	proprietary ingredient 2	No data available
Eye damage/irritation	potassium hydroxide	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns
	monoethanolamine	Irritant
	sodium metasilicate, pentahydrate	Corrosive. Causes eye burns.
	potassium pyrophosphate	Moderate irritation
	sodium hydroxide	A severe eye irritant. Corrosive to eyes; contact can cause corneal burns
	proprietary ingredient 1	Irritating
	proprietary ingredient 2	No data available
Respiratory/skin sensitization	potassium hydroxide	No data available
	monoethanolamine	No sensitizing effect.
	sodium metasilicate, pentahydrate	No data available
	potassium pyrophosphate	Not classified
	sodium hydroxide	No data available
	proprietary ingredient 1	No data available
	proprietary ingredient 2	Not a skin sensitizer based on components

Germ cell mutagenicity	potassium hydroxide	No data available
	monoethanolamine	Not genotoxic
	sodium metasilicate, pentahydrate	No data available
	potassium pyrophosphate	Not classified
	sodium hydroxide	No data available
	proprietary ingredient 1	No data available
	proprietary ingredient 2	No known significant effects or critical hazards
Carcinogenicity	potassium hydroxide	No data available
	monoethanolamine	Not carcinogenic
	sodium metasilicate, pentahydrate	No data available
	potassium pyrophosphate	No ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens
	sodium hydroxide	No data available
	proprietary ingredient 1	No data available
	proprietary ingredient 2	No components are listed as carcinogens by IARC, ACGIH, OSHA or NTP above the threshold of 0.1%
Reproductive toxicity	potassium hydroxide	No data available
	monoethanolamine	No data available
	sodium metasilicate, pentahydrate	No data available
	potassium pyrophosphate	Not classified
	sodium hydroxide	No data available
	proprietary ingredient 1	No data available
	proprietary ingredient 2	No known significant effects or critical hazards
STOT (single exposure)	potassium hydroxide	No data available
	monoethanolamine	No data available
	sodium metasilicate, pentahydrate	No data available
	potassium pyrophosphate	Not classified
	sodium hydroxide	No data available
	proprietary ingredient 1	No data available
	proprietary ingredient 2	No data available
STOT (repeated exposure)	potassium hydroxide	No data available
	monoethanolamine	No data available
	sodium metasilicate, pentahydrate	No data available
	potassium pyrophosphate	Not classified
	sodium hydroxide	No data available
	proprietary ingredient 1	No data available
	proprietary ingredient 2	No data available
Aspiration toxicity	potassium hydroxide	No data available
	monoethanolamine	No aspiration hazard expected
	sodium metasilicate, pentahydrate	No data available
	potassium pyrophosphate	Not classified
	sodium hydroxide	No data available
	proprietary ingredient 1	No data available
	proprietary ingredient 2	No data available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	Endpoint	Duration (Hr.)	Species	Value
potassium hydroxide	LC50	96	Fish	80mg/L
	EC0	48	Crustacea	<1mg/L
	NOEC	24	Fish	28mg/L
monoethanolamine	LC50	96	Fish	2-70mg/L
	EC50	48	Crustacea	32.6mg/L
	EC50	72	Algae or other aquatic plants	2.1mg/L
	NOEC	504	Crustacea	0.85mg/L
sodium metasilicate, pentahydrate	C50	96	Fish	2-70mg/L
	EC50	48	Crustacea	32.6mg/L
	EC50	72	Algae or other aquatic plants	2.1mg/L
	NOEC	504	Crustacea	0.85mg/L
potassium pyrophosphate	LC50	96	Fish	>100mg/L
	EC50	48	Crustacea	>100mg/L
	EC50	72	Algae or other aquatic plants	>100mg/L
	NOEC	72	Algae or other aquatic plants	>100mg/L
sodium hydroxide	LC50	96	Fish	<180mg/L
	EC50	48	Crustacea	40.4mg/L

Data extracted from Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity

On the basis of available evidence concerning either toxicity, persistence, potential to accumulate and or observed environmental fate and behavior, the material may present a danger ,immediate or long-term and /or delayed, to the structure and/ or functioning of natural ecosystems. Prevent, by any means available, spillage from entering drains or water courses.

DO NOT discharge into sewer or waterways.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle containers whenever possible. Product residues and containers should be disposed of in accordance with local government regulations

SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	NO
HAZCHEM	2X

Land transport (ADG)

UN number	1760
Packing group	II
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (contains potassium hydroxide)
Environmental hazard	No relevant data
Transport hazard class(es)	Class: 8 Sub risk: Not Applicable
Special precautions for user	Special provisions: 274 Limited quantity: 1L

SECTION 15 REGULATORY INFORMATION

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

POTASSIUM HYDROXIDE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

MONOETHANOLAMINE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6
Australian Inventory of Industrial Chemicals (AIIC)

SODIUM METASILICATE, PENTAHYDRATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals
Australian Inventory of Industrial Chemicals (AIIC)

POTASSIUM PYROPHOSPHATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australian Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION

Revision Schedule

Revision Date	02/07/2021
Initial Date	06/04/2016

SDS Version Summary

Version	Issue Date	Sections Updated
2.1	02/07/2021	Sections 2,3,5,8,11,12,15.16 have been updated or corrected

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, AICIS and HCIS Australia

DISCLAIMER: While the information in this Safety Data Sheet (SDS) is believed to be true and accurate based on the current level of knowledge available to us, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the control of WHYTES SPECIALISED EQUIPMENT and therefore the users are responsible to verify this data under their own particular conditions of use, applications and regulations to determine whether the product is suitable for their particular purpose and they assume all risks of their use, handling, disposal, reliance upon, publication or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes

Definitions and abbreviations

PC-TWA;	Permissible Concentration-Time Weighted Average
PC-STEL:	Permissible Concentration-Short Term Exposure Limit
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference of Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

End of SDS