



ARMOR ALL Bug & Tar Remover Spray

Safety Data Sheet

1. Identification of Substance and Company

Product Name:	ARMOR ALL Bug & Tar Remover Spray 500mL
Other Names:	None
HSNO Approval:	HSR002530 - Cleaning Products (Subsidiary Hazard) Group Standard 2006
Proper Shipping name	Not allocated
DG class	NA
UN Number:	NA
Packaging group:	NA
Hazchem Code:	1T (recommended)
Uses:	Domestic hard surface cleaner

Company Details

Company:	Spectrum Brands New Zealand Limited
Address:	Level one, 8 Hugo Johnson Drive, Penrose, 1061, Auckland, New Zealand
Telephone Number:	+64-9-571-7700
Emergency Telephone Number:	0800 764 766

2. Hazard Identification

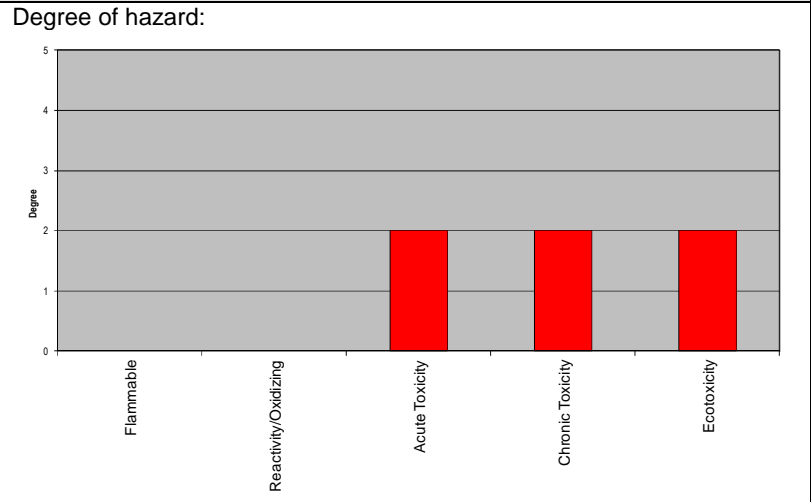
Hazard Classifications

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002530 - Cleaning Products (Subsidiary Hazard) Group Standard 2006), and is classified as follows:

Classes 6.3B, 6.4A, 6.5B, 9.1D

Symbols:

WARNING



Other classifications

There are no other Classifications that are known to apply.

Hazard and Precautionary Statements

Hazard Statements	Causes mild skin irritation. Causes eye irritation. May cause an allergic skin reaction Harmful to aquatic life.
Precautionary Statements	Read label before use. Wash hands thoroughly after handling. Wear eye/face protection. Avoid breathing gas/mist/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/eye protection/face protection. Avoid release to the environment.
	Further precautionary statements can be found in Section 4 – First Aid.
NOTE:	Persons sensitised to d-limonene should avoid contact with this product.



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3. Composition/Information on Ingredients

Component	CAS/ Identification	Conc (%)
d-Limonene	5989-27-5	1-3%
Surfactants	Proprietary	5-10%
Ingredients not contributing to HSNO classes	Proprietary	<5%
Water	7732-18-5	balance

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). If medical advice is needed, have product container or label at hand.

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is recommended.

Exposure

Swallowed IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. If concerned, see a doctor.
Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.
Skin contact IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: get medical advice/attention. Take off contaminated clothing and wash before re-use.
Inhaled No first aid measures normally required. However, if vapours or mists have been inhaled, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Advice to Doctor

Treat symptomatically.

5. Firefighting Measures

Fire and explosion hazards There are no specific risks for fire/explosion for this chemical. It is predominantly water and non-flammable.
Suitable Extinguishing Substances This product does not burn. Use extinguishing media suited to the materials that are burning.
Unsuitable extinguishing substances None known.
Protective Equipment Safety boots, non-flammable overalls, gloves, hat and preferably goggles. All skin areas should be covered.
Danger caused by material, its combustion products or gases produced Fire decomposition products from this product may form toxic and corrosive mixtures in confined spaces. Likely to decompose only after heating to dryness followed by further strong heating. Product of decomposition: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water.
Hazchem Code 1[T] (note: not a dangerous good)

6. Accidental Release Measures

Containment If greater than 1000L is stored, secondary containment and emergency plans to manage any potential spills must be in place. In all cases design storage to prevent discharge to stormwater.
Emergency procedures The bottle size generally will prevent major spills. If a spill occurs:
 Stop leak if safe/necessary; Isolate area (ensure no persons inside spill area)
 Collect spill – see below; Transfer to container for disposal
 Dispose of according to guidelines below (Section 13)
Clean-up method This product is not considered flammable. It can be collected by absorption onto material such as sand, vermiculite or other suitable absorbent material. Small spills do not require any special clean up method.
 Larger spills (e.g., 200 L) should be prevented from entering stormwater drains or waterways. If a significant quantity of material enters drains, advise emergency services.
Disposal Sweep up and shovel or collect recoverable material into labelled containers for recycling or salvage and dispose of promptly. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions Wear protective footwear, overalls, gloves and safety glasses to clean-up large spills. Can be slippery on floors, especially when wet.



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7. Handling and Storage			
Storage	Avoid storage of toxic substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances, as listed in Section 10.		
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.		
8. Exposure Controls/Personal Protection Equipment			
<i>Workplace Exposure Standards</i>			
A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 10mg/m ³ for dusts and mists when limits have not otherwise been established.			
NZ Workplace Exposure Standards (2016).	Ingredient	WES- TWA	WES- STEL
	Sodium Hydroxide	Ceiling: 2mg/m ³	Not listed
<i>Engineering Controls</i>			
In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.			
<i>Personal Protective Equipment</i>			
Eyes	Protective eyewear is not normally necessary when using this product. However, it is always prudent to use protective eyewear.		
Skin	Protective gloves are not normally necessary when using this product. However, it is always prudent to wear gloves, particularly if sensitive to chemicals.		
Respiratory	Respirator is not required under normal use. If product is being used in confined conditions, the use of a mask or respirator may be preferred.		
9. Physical and Chemical Properties			
Appearance:	Slightly hazy, yellowish liquid		
Odour	Lemon fragrance		
pH	11.75-12.75 (as supplied)		
Vapour pressure	Water vapour pressure		
Vapour density	No data		
Boiling point	Approximately 100°C at 100 kPa		
Volatile materials	Water component		
Softening/melting point	Approximately 0°C		
Solubility	Completely soluble in water		
Specific gravity or density	0.9855-1.0055 at 20°C		
Flash point	Not applicable (does not burn)		
Upper & lower flammable limits	Not applicable (does not burn)		
Auto ignition temperature	Not applicable (does not burn)		
Corrosiveness	Not corrosive		
10. Stability and Reactivity			
Stability	Stable - unlikely to react/decompose under normal conditions		
Conditions to be avoided	None known		
Incompatible materials	Acids, strong oxidisers.		
Hazardous decomposition products	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of sulfur. Water.		
Hazardous reactions	No specific hazards.		
11. Toxicological Information			
<i>Summary</i>			
IF SWALLOWED: Product may be irritating to gastrointestinal tract and mucous membranes. This should be transient.			
IF ON SKIN: repeated or prolonged contact may lead to mild skin irritation. Sensitised individuals may experience skin rashes or inflammation which can be severe.			
IF IN EYES: this product may be an eye irritant with stinging, redness of the eyes and watering of the eyes.			
IF INHALED: unlikely to cause discomfort or irritation.			
CHRONIC EXPOSURE: No known effects.			



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Supporting Data			
Acute:	<p>Oral This mixture is not considered to be harmful if swallowed. Using LD₅₀'s for ingredients, the calculated LD₅₀ (oral, rat) for the mixture is >5,000 mg/kg.</p> <p>Dermal No evidence of dermal toxicity.</p> <p>Inhaled No evidence of inhalation toxicity.</p> <p>Eye The mixture is considered to be an eye irritant, because some of the ingredients (surfactants, NaOH) present are considered eye irritants in more concentrated form. The pH is highly alkaline.</p> <p>Skin The mixture is considered to be a skin irritant, because some of the ingredients (surfactants, NaOH) present are considered skin irritants in more concentrated form. The pH is highly alkaline.</p>		
Chronic:	<p>Sensitisation: This product is a contact sensitiser. It contains >0.1% d-Limonene, which is a known sensitiser.</p> <p>Mutagenicity: No evidence of mutagenicity for the mixture or any of its components (>0.1%)</p> <p>Carcinogenicity: No evidence of carcinogenicity for the mixture. d-Limonene is Class 3 - unclassifiable as to carcinogenicity to humans (IARC).</p> <p>Reproductive / Developmental: No evidence of reproductive toxicity for the mixture or any of its components (>0.1%).</p> <p>Systemic: No evidence of target organ toxicity for any of the ingredients present >1%</p>		
Aggravation of Existing Conditions:	Sensitised individuals. Open wounds, abraded skin.		
12. Ecological Data			
<i>Summary</i>			
This product is considered harmful in the aquatic environment. Do not release to the environment.			
<i>Supporting Data</i>			
Aquatic	Limited data available on the product. D-Limonene is considered to be ecotoxic to aquatic animals in concentrated form. 0.545 mg/l (96hr, fish), 0.048mg/L (48 hr, Crustacean), 0.719 mg/L (72hr, Algal). The mixture has a high pH, which may affect aquatic life.		
Bioaccumulation	Not considered bioaccumulative,		
Degradability	Considered rapidly degradable.		
Soil	No evidence of soil toxicity.		
Terrestrial Vertebrate	Animal-based acute toxicity data indicates low toxicity for terrestrial vertebrates.		
Terrestrial Invertebrate	No evidence of terrestrial invertebrate toxicity for the mixture or any of its components (>0.1%)		
Biocidal	The product is not designed as a biocide.		
13. Disposal Considerations			
Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.		
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.		
Contaminated Packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.		
14. Transport Information			
There are no specific restrictions for this product (not a dangerous good).			
UN Number	NA	Proper Shipping Name	NA
Class(es)	NA	Packing group	NA
Precautions	NA	HAZCHEM code	1T (recommended)



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15. Regulatory Information

This product has been approved under the Hazardous Substances and New Organisms Act HSR002530 Cleaning Products (Subsidiary Hazard) Group Standard 2006.

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing >50L.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Required if >1000L is stored.
Approved handler	Not required.
Tracking	Not required.
Bunding & secondary containment	Required if >1000L is stored.
Signage	Required if >10000L is stored.
Location Test certificate	Not required.
Flammable zone	Not required.
Fire extinguisher	Not required.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	Approval HSR002530 Cleaning Products (Subsidiary Hazard) Group Standard 2006.Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority (New Zealand)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS/SDS	Material Safety Data Sheet (or Safety Data Sheet)
PES	Prescribed Exposure Standard means a WES or a biological exposure standard that is prescribed in a regulation, a safe work instrument or an approval under HSNO (including group standards).
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.



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<i>References</i>	
Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
WES 2016	The NZ Workplace Exposure Standards Effective from 2016, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz .
WES 2002	Workplace Exposure Standards published by the Occupational Safety and Health Service, Department of Labour, January 2002, ISBN 0-477-03660-0. These are the WES referred to under the Group Standard (HSNO approval) and may constitute a PES.
Other References	Suppliers MSDS
<i>Review</i>	
Date	Reason for Review
July 2013	new MSDS
November 2016	Change of logo and company name, HSE to HSAW, formatting.
<i>Disclaimer</i>	
<p>This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, EPA Guidelines and international classifications. This MSDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the MSDS author, email info@datachem.co.nz or phone: (09) 940 30 80.</p>	
