Auto Klene Solutions

Print Date: 23/03/2016

Safety Data Sheet according to WHS and ADG requirements

Initial Date: **Not Available** S.GHS.AUS.EN

Chemwatch Hazard Alert Code: 1

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

Product Identifier	
Product name	Auto Klene Blue Heeler Curtain Clean
Synonyms	Not Available
Other means of identification	Not Available
Relevant identified uses of th	e substance or mixture and uses advised against
Relevant identified uses	General purpose cleaner.
Details of the supplier of the	safety data sheet
Registered company name	Auto Klene Solutions
Address	1/83 Merrindale Drive VIC Croydon 3136 Australia
Telephone	+61 3 8761 1900
Fax	+61 3 8761 1955
Website	https://www.autoklene.com/msds/
Email	Not Available
Emergency telephone number	
Association / Organisation	Not Available
Emergency telephone numbers	131 126 (Poisons Information Centre)
Other emergency telephone numbers	0408 406 968 (Mark Adams mobile)
SECTION 2 HAZARDS IDE	ENTIFICATION

Classification of the substance or mixture

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

CHEMWATCH HAZARD RATINGS

	Min	Max	
Flammability	0		
Toxicity	0		0 = Minimum
Body Contact	0		1 = Low 2 = Moderate
Reactivity	1		3 = High
Chronic	0		4 = Extreme

Poisons Schedule	Not Applicable
Classification	Not Applicable
Label elements	
GHS label elements	Not Applicable
SIGNAL WORD	NOT APPLICABLE

Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

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Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
111-76-2	<10	ethylene glycol monobutyl ether
Not Available	<10	non ionic + anionic surfactants
Not Available	<10	phosphates
6834-92-0	<10	sodium metasilicate, anhydrous

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: ► Wash out immediately with water. ► If irritation continues, seek medical attention. ► Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- ▶ There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

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Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result		
Advice for firefighters			
	▶ Alert Fire Brigade and tell them location and nature of hazard.		
	▶ Wear breathing apparatus plus protective gloves in the event of a fire.		
	▶ Prevent, by any means available, spillage from entering drains or water courses.		
Fire Fighting	▶ Use fire fighting 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.		
	▶ Non combustible.		
	▶ Not considered to be a significant fire risk.		
Electronical and	▶ Expansion or decomposition on heating may lead to violent rupture of containers.		
Fire/Explosion Hazard	▶ Decomposes on heating and may produce toxic fumes of carbon monoxide		
riazai u	(CO). ▶ May emit acrid smoke.		
	Decomposition may produce toxic fumes of:, carbon dioxide (CO2), phosphorus oxides (POx), silicon dioxide (SiO2), other pyrolysis products typical		
	of burning organic material May emit corrosive fumes.		

SECTION 6 ACCIDENTAL RELEASE MEASURES

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Personal precautions, protective equipment and emergency procedures ▶ Clean up all spills immediately. ▶ Avoid breathing vapours and contact with skin and eyes. ▶ Control personal contact with the substance, by using protective equipment. ▶ **Minor Spills** Contain and absorb spill with sand, earth, inert material or vermiculite. ▶ Wipe up. ▶ Place in a suitable, labelled container for waste disposal. Minor hazard. ▶ Clear area of personnel. Major Spills ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Control personal contact with the substance, by using protective equipment as required. ▶ Prevent spillage from entering drains or water ways. ▶ Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling	9
	▶ Limit all unnecessary personal contact.
	▶ Wear protective clothing when risk of exposure occurs.
	▶ Use in a well-ventilated area.
Safe handling	▶When handling DO NOT eat, drink or smoke.
	▶ Always wash hands with soap and water after handling.
	▶ Avoid physical damage to containers.
	▶ Use good occupational work practice.
	▶ Store in original containers.
	▶ Keep containers securely sealed.
Other information	▶ Store in a cool, dry, well-ventilated area.
Other Information	▶ 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.
Conditions for safe storage,	including any incompatibilities
	▶ Polyethylene or polypropylene container.
Suitable container	▶ Packing as recommended by manufacturer.
	▶ Check all containers are clearly labelled and free from leaks.
Storage	▶ Avoid reaction with oxidising agents
incompatibility	Avoid contamination of water, foodstuffs, feed or seed.

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	ethylene glycol monobutyl ether	2-Butoxyethanol	96.9 mg/m3 / 20 ppm	242 mg/m3 / 50 ppm	Not Available	Sk

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethylene glycol monobutyl ether	Butoxyethanol, 2-; (Glycol ether EB)	20 ppm	20 ppm	700 ppm
sodium metasilicate, anhydrous	Sodium metasilicate pentahydrate	45 mg/m3	45 mg/m3	170 mg/m3
sodium metasilicate, anhydrous	Sodium silicate; (Sodium metasilicate)	18 mg/m3	230 mg/m3	230 mg/m3
Ingredient	Original IDLH	Revised IDLH		
ethylene glycol monobutyl ether	700 ppm	700 [Unch] ppm		
non ionic + anionic surfactants	Not Available	Not Available		
phosphates	Not Available	Not Available		
sodium metasilicate, anhydrous	Not Available	Not Available		

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Exposure controls

None required when handling small quantities.

Engine

controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

Personal protection

Appropriate engineering









Eye and face protection

No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE:

For the properties of the pro

▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of

▶ chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable Skin protection See Hand protection below No special equipment needed when handling small quantities. Hands/feet OTHERWISE: Wear chemical protective gloves, e.g. PVC. protection **Body protection** See Other protection below No special equipment needed when handling small quantities. OTHERWISE: Other protection Overalls. ▶ Barrier cream. ▶ Eyewash unit. Thermal hazards Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index"

The effect(s) of the following substance(s) are taken into account in the *computergenerated* selection:

Auto Klene T2000

СРІ
A
Α
Α
В
В
В
С
С
С

CPI - Chemwatch Performance Index

A: Best Selection

C: Poor to Dangerous Choice for other than short term immersion

 $\label{NOTE:As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -$

*Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	A-AUS / Class 1 P2	-	A-PAPR-AUS / Class 1 P2
up to 25 x ES	Air-line*	A-2 P2	A-PAPR-2 P2
up to 50 x ES	-	A-3 P2	-
50+ x ES	-	Air-line**	-

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G =

Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB =

Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

B: Satisfactory; may degrade after 4 hours continuous immersion

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Information on basic physical and chemical properties **Appearance** Yellow liquid with citrus odour; mixes with water. Physical state Relative density (Water = 1.050 Liquid Partition coefficient n-Odour Not Available Not Available octanol / water **Auto-ignition** Odour threshold Not Available temperature Not Applicable (°C) Decomposition pH (as supplied) 11.8 Not Available temperature Melting point / freezing ~0 Viscosity (cSt) Not Available point (°C) Initial boiling point and boiling range (°C) Molecular weight ~100 Not Applicable (g/mol) Flash point (°C) Not Applicable Taste Not Available **Evaporation rate** as for water Explosive Not Available properties Flammability Not Applicable Oxidising Not Available properties Surface Tension (dyn/cm **Upper Explosive Limit** Not Applicable Not Available or mN/m) (%) Lower Explosive Limit Not Applicable Volatile Component (%vol) Not Available (%) Not Available Not Available Vapour pressure Gas group (kPa) Solubility in water Miscible pH as a solution Not Available (g/L) (1%)Vapour density (Air = Not Available VOC g/L Not Available **SECTION 10 STABILITY AND REACTIVITY** Reactivity See section 7 ▶ Unstable in the presence of incompatible materials. ▶ Product is considered stable. **Chemical stability** ▶ Hazardous polymerisation will not occur. Possibility of hazardous See section 7 reactions Conditions to See section 7 avoid Incompatible See section 7 materials Hazardous decomposition See section 5 products **SECTION 11 TOXICOLOGICAL INFORMATION**

Information on toxicological	effects		
Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.		
Ingestion	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	There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.		
Еуе	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).		
Chronic	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.		
Auto Klene T2000	TOXICITY IRRITATION		

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	Not Available	Not Available	
	TOXICITY	IRRITATION	
ethylene glycol monobutyl ether	dermal (rat) LD50: >2000 mg/kg Inhalation (rat) LC50: 450 ppm/की Oral (rat) LD50: 250 mg/kg ²	* [Union Carbide] Eye (rabbit): 100 mg Eye (rabbit): 100 mg	
		Skin (rabbit): 500 mg	
sodium metasilicate, anhydrous	TOXICITY	IRRITATION	
amyarous	dermal (rat) LD50: >5000 mg/kg	Skin (human): 250 m	ng/24h SEVERE
	Oral (rat) LD50: 600 mg/klgl	Skin (rabbit): 250 mg	g/24h SEVERE
Legend:	Nalue obtained from Europe ECHA Registered Su specified data extracted from RTECS - Register of Tox		ined from manufacturer's SDS. Unless otherwise
ETHYLENE GLYCOL MONOBUTYL ETHER	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. For ethylene glycol monoalkyl ethers and their acetates (EGMAEs): Typical members of this category are ethylene glycol propylene ether (EGPE), ethylene glycol butyl ether (EGBE) and ethylene glycol hexyl ether (EGHE) and their acetates. EGMAEs are substrates for alcohol dehydrogenase isozyme ADH-3, which catalyzes the conversion of their terminal alcohols to aldehydes (which are transient metabolities). Further, rapid conversion of the aldehydes by aldehyde dehydrogenase produces alkoxyacetic acids, which are the predominant urinary metabolites of mono substituted glycol ethers. Acute Toxicity: Oral LD50 values in rats for all category members range from 739 (EGHE) to 3089 mg/kg bw (EGPE), with values increasing with decreasing molecular weight. Four to six hour acute inhalation toxicity studies were conducted for these chemicals in rats at the highest vapour concentrations practically achievable. Values range from LC0 > 85 ppm (608 mg/mg) for EGHE, LC50 > 400ppm (2820 mg/mg) for EGBEA to LC50 > 2132 ppm (9061 mg/m3) for EGPE. No lethality was observed for any of these materials under these conditions. Exposure of pregnant rats to ethylene glycol monobutyl ether (2-butoxyethanol) at 100 ppm or rabbits at 200 ppm during organogenesis resulted in maternal toxicity and embryotoxicity including a decreased number of viable implantations per liter. Slight foetoxicity in the form of poorly ossified or unossified skeletal elements was also apparent in rats. Teratogenic effects were not observed in other species. At least one researcher has stated that the reproductive effects were less than that of other monoalkyl ethers of ethylene glycol. Exposure of male and femal		
SODIUM METASILICATE, ANHYDROUS	The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration. Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis		
	of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised		
	by dyspnea, cough and mucus production.		
Acute Toxicity		Carcinogenicity	
Skin Irritation/Corrosion		Reproductivity	
Serious Eye Damage/Irritation	0	STOT - Single Exposure	0

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Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	

Legend:



- Data available but does not fill the criteria for classification
- Data required to make classification available
- Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

xic	

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
ethylene glycol monobutyl ether	EC50	384	Crustacea	51.539mg/L	3
ethylene glycol monobutyl ether	LC50	96	Fish	222.042mg/L	3
ethylene glycol monobutyl ether	EC50	48	Crustacea	164mg/L	2
ethylene glycol monobutyl ether	NOEC	168	Crustacea	56mg/L	2
ethylene glycol monobutyl ether	EC50	96	Algae or other aquatic plants	720mg/L	2
sodium metasilicate, anhydrous	EC50	96	Crustacea	160mg/L	1
sodium metasilicate, anhydrous	LC50	96	Fish	180mg/L	1
sodium metasilicate, anhydrous	EC50	48	Crustacea	1700mg/L	2
sodium metasilicate, anhydrous	EC50	72	Algae or other aquatic plants	207mg/L	2

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite

V3.12 -

Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE

(Japan) -

Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Persistence and degradability

Legend:

Ingredient	Persistence: Water/Soil	Persistence: Air
ethylene glycol monobutyl ether	LOW (Half-life = 56 days)	LOW (Half-life = 1.37 days)

Bioaccumulative potential

Ingredient	Bioaccumulation
ethylene glycol monobutyl ether	LOW (BCF = 2.51)

Mobility in soil

Ingredient	Mobility
ethylene glycol monobutyl ether	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

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Waste treatment methods

Product / Packaging disposal

▶ Recycle wherever possible.

- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- ▶ Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material).
- ▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 TRANSPORT INFORMATION

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Labels Required

Marine Pollutant NO

HAZCHEM Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC

Monographs

SODIUM METASILICATE, ANHYDROUS(6834-92-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists Australia Inventory of Chemical Substances (AICS)		
National Inventory	Status	
Australia - AICS	Y	
Canada - DSL	Y	
Canada - NDSL	N (sodium metasilicate, anhydrous; ethylene glycol monobutyl ether)	
China - IECSC	Y	
Europe - EINEC / ELINCS / NLP	Y	
Japan - ENCS	Y	
Korea - KECI	Y	
New Zealand - NZIoC	Y	
Philippines - PICCS	Y	
USA - TSCA	Y	
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)	

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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