



Bostik Bondflex 100 Clear #341-0949, 341-0955, 341-0961 (AUS) RS Components

Chemwatch Hazard Alert Code: 2

Chemwatch: 5415-30
Version No: 2.1.1.1
Safety Data Sheet according to WHS and ADG requirements

Issue Date: 19/07/2020
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L.GHS.AUS.EN

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name	Bostik Bondflex 100 Clear #341-0949, 341-0955, 341-0961 (AUS)
Chemical Name	Not Applicable
Synonyms	Not Available
Chemical formula	Not Applicable
Other means of identification	Not Available

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

Relevant identified uses	Sealant.
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Details of the supplier of the safety data sheet

Registered company name	RS Components
Address	25 Pavesi Street Smithfield NSW 2164 Australia
Telephone	+1 300 656 636
Fax	+1 300 656 696
Website	www.au.rs-online.com
Email	Not Available

Emergency telephone number

Association / Organisation	CHEMWATCH EMERGENCY RESPONSE
Emergency telephone numbers	+61 2 9186 1132
Other emergency telephone numbers	+61 1800 951 288

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 Hazards identification

Classification of the substance or mixture

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


ChemWatch Hazard Ratings

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

Poisons Schedule	Not Applicable
Classification [1]	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements

Bostik Bondflex 100 Clear #341-0949, 341-0955, 341-0961 (AUS)

Hazard pictogram(s)	
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Signal word	Warning
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Hazard statement(s)

H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statement(s) Prevention

P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
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Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P332+P313	If skin irritation occurs: Get medical advice/attention.

Precautionary statement(s) Storage

Not Applicable

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
17865-07-5	1-<3	<u>propyltriacetoxysilane</u>
4253-34-3	1-<2.5	<u>methyltriacetoxysilane</u>
541-02-6	0.1-<1	<u>decamethylcyclopentasiloxane</u>
556-67-2	0.1-<1	<u>octamethylcyclotetrasiloxane</u>
540-97-6	0.1-<1	<u>dodecamethylcyclohexasiloxane</u>
64359-81-5	0.01-<0.05	<u>4,5-dichloro-2-octyl-3(2H)-isothiazolone</u>

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ 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	<p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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.
Ingestion	<ul style="list-style-type: none"> ▶ 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

Treat symptomatically.

SECTION 5 Firefighting measures**Extinguishing media**

- ▶ Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Use water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ Combustible. ▶ Slight fire hazard when exposed to heat or flame. ▶ Heating may cause expansion or decomposition leading to violent rupture of containers. ▶ On combustion, may emit toxic fumes of carbon monoxide (CO). <p>Combustion products include: carbon dioxide (CO₂) silicon dioxide (SiO₂) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes.</p>
HAZCHEM	Not Applicable

SECTION 6 Accidental release measures**Personal precautions, protective equipment and emergency procedures**

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	<ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Avoid contact with skin and eyes. ▶ Wear impervious gloves and safety goggles. ▶ Trowel up/scrape up.
Major Spills	<p>Minor hazard.</p> <ul style="list-style-type: none"> ▶ Clear area of personnel. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Control personal contact with the substance, by using protective equipment as required.

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

SECTION 7 Handling and storage**Precautions for safe handling**

Safe handling	<ul style="list-style-type: none"> ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area. ▶ Prevent concentration in hollows and sumps.
Other information	<ul style="list-style-type: none"> ▶ Store in original containers. ▶ Keep containers securely sealed. ▶ No smoking, naked lights or ignition sources. ▶ Store in a cool, dry, well-ventilated area.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▶ Metal can or drum ▶ Packaging as recommended by manufacturer. ▶ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	<ul style="list-style-type: none"> ▶ Avoid strong acids, bases. ▶ Avoid reaction with oxidising agents

SECTION 8 Exposure controls / personal protection**Control parameters**

Bostik Bondflex 100 Clear #341-0949, 341-0955, 341-0961 (AUS)

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
methyltriacetoxysilane	5 mg/m3	35 mg/m3	250 mg/m3
octamethylcyclotetrasiloxane	30 ppm	68 ppm	130 ppm
dodecamethylcyclohexasiloxane	150 mg/m3	1,700 mg/m3	9,900 mg/m3

Ingredient	Original IDLH	Revised IDLH
propyltriacetoxysilane	Not Available	Not Available
methyltriacetoxysilane	Not Available	Not Available
decamethylcyclopentasiloxane	Not Available	Not Available
octamethylcyclotetrasiloxane	Not Available	Not Available
dodecamethylcyclohexasiloxane	Not Available	Not Available
4,5-dichloro-2-octyl-3(2H)-isothiazolone	Not Available	Not Available


Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
decamethylcyclopentasiloxane	E	≤ 0.1 ppm
octamethylcyclotetrasiloxane	E	≤ 0.1 ppm
4,5-dichloro-2-octyl-3(2H)-isothiazolone	E	≤ 0.1 ppm

Notes: Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

MATERIAL DATA

Exposure controls

Appropriate engineering controls	<p>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:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>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.</p>
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ▶ Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure. ▶ 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 afford face protection. ▶ Alternatively a gas mask may replace splash goggles and face shields.
Skin protection	See Hand protection below
Hands/feet protection	▶ Elbow length PVC gloves
Body protection	See Other protection below
Other protection	<ul style="list-style-type: none"> ▶ Overalls. ▶ P.V.C apron. ▶ Barrier cream. ▶ Skin cleansing cream.

Respiratory protection

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

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	ABK-AUS / Class1 P2	-
up to 50	1000	-	ABK-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	ABK-2 P2
up to 100	10000	-	ABK-3 P2
100+			Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand

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)

- ▶ Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- ▶ The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- ▶ Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Colourless paste with acetic acid odour; dose not mix with water.		
Physical state	Non Slump Paste	Relative density (Water = 1)	1.03-1.05
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	>200
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	300	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	>100	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	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	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	Not Available	VOC g/L	<3

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none"> ▶ 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 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. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health).
Skin Contact	<p>Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis.</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p> <p>Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</p>
Eye	Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.
Chronic	Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Bostik Bondflex 100 Clear #341-0949, 341-0955, 341-0961 (AUS)	TOXICITY	IRRITATION
		Dermal (None) LD50: 8679.4 mg/kg ^[2]
propyltriacetoxysilane	TOXICITY	IRRITATION
	Not Available	Not Available
methyltriacetoxysilane	TOXICITY	IRRITATION
	Oral(Rat) LD50; 1550 mg/kg ^[1]	Eye: adverse effect observed (irreversible damage) ^[1] Skin: adverse effect observed (corrosive) ^[1]
decamethylcyclopentasiloxane	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >16.789 mg/kg ^[2]	Eye (rabbit): 500 mg/24h - mild
	Inhalation(Rat) LC50; 8.67 mg/l ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral(Rat) LD50; >5000 mg/kg ^[1]	Skin (rabbit): 500 mg/24h - mild Skin: adverse effect observed (irritating) ^[1] Skin: no adverse effect observed (not irritating) ^[1]
octamethylcyclotetrasiloxane	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2.632 mg/kg ^[2]	Eye (rabbit): 500 mg/24h - mild
	Inhalation(Rat) LC50; 36 mg/l ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral(Rat) LD50; 1540 mg/kg ^[2]	Skin (rabbit): 500 mg/24h - mild Skin: adverse effect observed (irritating) ^[1] Skin: no adverse effect observed (not irritating) ^[1]
dodecamethylcyclohexasiloxane	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral(Rat) LD50; >2000 mg/kg ^[1]	Skin: adverse effect observed (irritating) ^[1] Skin: no adverse effect observed (not irritating) ^[1]
4,5-dichloro-2-octyl-3(2H)-isothiazolone	TOXICITY	IRRITATION
	Inhalation(Rat) LC50; 0.758 mg/L ^[2]	Not Available
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances	

PROPYLTRIACETOXSILANE	<p>For alkoxyxilanes:</p> <p>Low molecular weight alkoxyxilanes (including alkyl orthosilicates) are a known concern for lung toxicity, due to inhalation of vapours or aerosols causing irreversible lung damage at low doses.</p> <p>Alkoxyxilane groups that rapidly hydrolyse when in contact with water, result in metabolites that may only cause mild skin irritation. Although there appears to be signs of irritation under different test conditions, based on the available information, the alkoxyxilanes cannot be readily classified as a skin irritant.</p> <p>The trimethoxyxilane group of chemicals have previously been associated with occupational eye irritation in exposed workers who experienced severe inflammation of the cornea. Based on the collective information, these substances are likely to be severe irritants to the eyes.</p> <p>Methoxyxilanes are generally reported to possess higher reactivity and toxicity compared to ethoxyxilanes; some methoxyxilanes appear to be carcinogenic. In the US, alkoxyxilanes with alkoxy groups greater than C2 are classified as moderate concern. Based on available information on methoxyxilanes, the possibility that this family causes skin sensitisation cannot be ruled out.</p> <p>Amine-functional methoxyxilanes have previously been implicated as a cause of occupational contact dermatitis, often as a result of repeated skin exposure with workers involved in the manufacture or use of the resins containing the chemical during fibreglass production.</p>
METHYLTRIACETOXSILANE	<p>The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p> <p>The material may produce respiratory tract irritation. Symptoms of pulmonary irritation may include coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and a burning sensation.</p> <p>Unlike most organs, the lung can respond to a chemical insult or a chemical agent, by first removing or neutralising the irritant and then repairing the damage (inflammation of the lungs may be a consequence).</p> <p>The repair process (which initially developed to protect mammalian lungs from foreign matter and antigens) may, however, cause further damage to the lungs (fibrosis for example) when activated by hazardous chemicals. Often, this results in an impairment of gas exchange, the primary function of the lungs. Therefore prolonged exposure to respiratory irritants may cause sustained breathing difficulties.</p> <p>The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.</p> <p>The acute toxicity of methyltriacetoxysilane is described by LD50s in the rat (oral) of 1602 (neat) and 2850 (in corn oil vehicle) mg/kg bw. The clinical signs included decreased body weight and food consumption, labored breathing, rales, red stains around the snout and extremities, salivation, lacrimation, lethargy, irregular gait, hunched posture, red urination, black/brown anogenital staining, paleness, chromodacryorrhea and hypothermia. Necropsy findings, mainly involving the stomach were stomach adhesions, thickened walls and abnormal stomach contents. Although acute toxicity data for the inhalation or dermal routes of exposure are not available</p>

	<p>for methyltriacetoxysilane, these exposures will likely result in local site of contact effects from acetic acid. NOAELs following repeated exposure to acetic acid and its salts range from 210 mg/kg bw/day (2-4 month acetic acid drinking water study; systemic toxicity) to 3600 mg/kg bw/day (acetic acid, sodium salt, 4 week dietary study; no effects reported). Signs of irritation/corrosion at the site of contact as well as systemic toxicity have been reported. Prolonged inhalation exposure to acetic acid results in muscle imbalance, increase in blood cholinesterase activity, decreases in albumins and decreased growth at concentrations greater than 0.01 mg/m3/day.</p> <p>Groups of 20 mice/sex were given 0.025% sodium acetate in drinking water (about 60 mg/kg bw/day) for 1 week before breeding, during a 9-day breeding period and (females only) throughout pregnancy, lactation and until the offspring were weaned at 3 weeks of age. No effects on fertility were observed.</p>
DECAMETHYLCYCLOPENTASILOXANE	<p>Liver changes, spleen changes recorded. Carcinogenicity: Animal testing showed no carcinogenic effects. Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES) Result: negative Remarks: Based on test data Genotoxicity in vivo: Test Type: Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo Species: Rat Application Route: inhalation (vapor) Result: negative Remarks: Based on test data Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effect. Effects on fertility : Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Inhalation Symptoms: No effects on fertility. Remarks: Based on test data Effects on fetal development : Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Inhalation Symptoms: No effects on fetal development. Remarks: Based on test data Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments Routes of exposure: Assessment: No significant health effects observed in animals at concentrations of 200 mg/kg bw or less. Results from a 2 year repeated vapour inhalation exposure study to rats of decamethylcyclopentasiloxane (D5) indicate effects (uterine endometrial tumours) in female animals. This finding occurred at the highest exposure dose (160 ppm) only. Studies to date have not demonstrated if this effect occurs through a pathway that is relevant to humans</p>
OCTAMETHYLCYCLOTETRAILOXANE	<p>Does not cause skin sensitization Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES) Result: negative Remarks: Based on test data Test Type: Mutagenicity (in vitro mammalian cytogenetic test) Result: negative Remarks: Based on test data Test Type: Chromosome aberration test in vitro Result: negative Remarks: Based on test data Test Type: In vitro sister chromatid exchange assay in mammalian cells Result: negative Remarks: Based on test data Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro) Result: negative Remarks: Based on test data Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Rat Application Route: inhalation (vapor) Result: negative Remarks: Based on test data Test Type: Rodent dominant lethal test (germ cell) (in vivo) Species: Rat Application Route: Ingestion Result: negative Remarks: Based on test data Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects Effects on fertility : Test Type: Two-generation reproduction toxicity study Species: Rat, male and female Application Route: inhalation (vapor) Symptoms: Effects on fertility. Remarks: Based on test data Effects on fetal development : Test Type: Prenatal development toxicity study (teratogenicity) Species: Rabbit Application Route: inhalation (vapor) Symptoms: No effects on fetal development. Remarks: Based on test data Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments. STOT-single exposure May cause damage to organs (Eyes, Central nervous system Routes of exposure: Skin contact Assessment: No significant health effects observed in animals at concentrations of 200 mg/kg bw or less. Results from a 2 year repeated vapor inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Repeated exposure in rats to D4 resulted in protoporphyrin accumulation in the liver.</p>
4,5-DICHLORO-2-OCTYL-3(2H)-ISOTHIAZOLONE	<p>The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. Guinea Pig Assay: causes sensitisation * Did not show teratogenic effects in animal experiments. * Not mutagenic * Rohm and Haas MSDS Rozone 2000 Mildewcide</p>
PROPYLTRIACETOXYSILANE & METHYLTRIACETOXYSILANE & DECAMETHYLCYCLOPENTASILOXANE & 4,5-DICHLORO-2-OCTYL-3(2H)-ISOTHIAZOLONE	<p>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.</p>
PROPYLTRIACETOXYSILANE & DODECAMETHYLCYCLOHEXASILOXANE	<p>No significant acute toxicological data identified in literature search.</p>
DECAMETHYLCYCLOPENTASILOXANE & OCTAMETHYLCYCLOTETRAILOXANE	<p>The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p> <p>The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.</p> <p>Routes of exposure: Ingestion Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less. Routes of exposure: inhalation (vapor) Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.</p>

Acute Toxicity	✗	Carcinogenicity	✗
Skin Irritation/Corrosion	✓	Reproductivity	✗
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✗
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

Legend: ✗ – Data either not available or does not fill the criteria for classification
 ✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity

Bostik Bondflex 100 Clear #341-0949, 341-0955, 341-0961 (AUS)	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available

Continued...

Bostik Bondflex 100 Clear #341-0949, 341-0955, 341-0961 (AUS)

	Endpoint	Test Duration (hr)	Species	Value	Source
propyltriacetoxysilane	NOEC(ECx)	72	Algae or other aquatic plants	18mg/l	2
	EC50	48	Crustacea	65mg/l	2
	LC50	96	Fish	7988mg/l	2
	EC50	72	Algae or other aquatic plants	24.41mg/l	2
methyltriacetoxysilane	NOEC(ECx)	72	Algae or other aquatic plants	>=3.6mg/l	2
	EC50	48	Crustacea	65mg/l	2
	LC50	96	Fish	>=79<=88mg/l	2
	EC50	72	Algae or other aquatic plants	>3.6mg/l	2
decamethylcyclopentasiloxane	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	1080	Fish	>=0.017mg/l	2
octamethylcyclotetrasiloxane	Endpoint	Test Duration (hr)	Species	Value	Source
	EC0(ECx)	24	Crustacea	3.1mg/l	1
	LC50	96	Fish	>12.134mg/L	4
dodecamethylcyclohexasiloxane	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
4,5-dichloro-2-octyl-3(2H)-isothiazolone	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50(ECx)	120	Algae or other aquatic plants	<0.001mg/L	4
	LC50	96	Fish	<0.001mg/L	4
	EC50	48	Crustacea	<0.001mg/L	4
	EC50	72	Algae or other aquatic plants	0.003mg/l	4
	EC50	96	Algae or other aquatic plants	<0.001mg/L	4

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - 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

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
methyltriacetoxysilane	HIGH	HIGH
decamethylcyclopentasiloxane	HIGH	HIGH
octamethylcyclotetrasiloxane	HIGH	HIGH
dodecamethylcyclohexasiloxane	HIGH	HIGH
4,5-dichloro-2-octyl-3(2H)-isothiazolone	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
methyltriacetoxysilane	LOW (LogKOW = 0.2467)
decamethylcyclopentasiloxane	HIGH (LogKOW = 5.2)
octamethylcyclotetrasiloxane	HIGH (BCF = 12400)
dodecamethylcyclohexasiloxane	HIGH (LogKOW = 6.3286)
4,5-dichloro-2-octyl-3(2H)-isothiazolone	HIGH (LogKOW = 4.7295)

Mobility in soil

Ingredient	Mobility
methyltriacetoxysilane	LOW (KOC = 35.19)
decamethylcyclopentasiloxane	LOW (KOC = 145200)
octamethylcyclotetrasiloxane	LOW (KOC = 17960)
dodecamethylcyclohexasiloxane	LOW (KOC = 1174000)
4,5-dichloro-2-octyl-3(2H)-isothiazolone	LOW (KOC = 5796)

SECTION 13 Disposal considerations

Bostik Bondflex 100 Clear #341-0949, 341-0955, 341-0961 (AUS)

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> ▶ Recycle wherever possible or consult manufacturer for recycling options. ▶ Consult State Land Waste Authority for disposal. ▶ Bury or incinerate residue at an approved site. ▶ Recycle containers if possible, or dispose of in an authorised landfill.
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SECTION 14 Transport information

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

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
propyltriacetoxysilane	Not Available
methyltriacetoxysilane	Not Available
decamethylcyclopentasiloxane	Not Available
octamethylcyclotetrasiloxane	Not Available
dodecamethylcyclohexasiloxane	Not Available
4,5-dichloro-2-octyl-3(2H)-isothiazolone	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
propyltriacetoxysilane	Not Available
methyltriacetoxysilane	Not Available
decamethylcyclopentasiloxane	Not Available
octamethylcyclotetrasiloxane	Not Available
dodecamethylcyclohexasiloxane	Not Available
4,5-dichloro-2-octyl-3(2H)-isothiazolone	Not Available

SECTION 15 Regulatory information

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

propyltriacetoxysilane is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

methyltriacetoxysilane is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

decamethylcyclopentasiloxane is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

octamethylcyclotetrasiloxane is found on the following regulatory lists

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

Chemical Footprint Project - Chemicals of High Concern List

dodecamethylcyclohexasiloxane is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

4,5-dichloro-2-octyl-3(2H)-isothiazolone is found on the following regulatory lists

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6

Australian Inventory of Industrial Chemicals (AIIC)

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	No (propyltriacetoxysilane; 4,5-dichloro-2-octyl-3(2H)-isothiazolone)
Canada - NDSL	No (methyltriacetoxysilane; decamethylcyclopentasiloxane; octamethylcyclotetrasiloxane; dodecamethylcyclohexasiloxane)
China - IECSC	Yes

National Inventory	Status
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	No (propyltriacetoxysilane)
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (propyltriacetoxysilane; dodecamethylcyclohexasiloxane)
Vietnam - NCI	Yes
Russia - ARIPS	No (propyltriacetoxysilane; 4,5-dichloro-2-octyl-3(2H)-isothiazolone)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets)

SECTION 16 Other information

Revision Date	19/07/2020
Initial Date	19/07/2020

SDS Version Summary

Version	Issue Date	Sections Updated
2.1.1.1	19/07/2020	Classification, Fire Fighter (fire/explosion hazard)

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.

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.

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 Governmental Industrial Hygienists
 STEL: Short Term Exposure Limit
 TEEL: Temporary Emergency Exposure Limit.
 IDLH: Immediately Dangerous to Life or Health Concentrations
 OSF: Odour Safety Factor
 NOAEL :No Observed Adverse Effect Level
 LOAEL: Lowest Observed Adverse Effect Level
 TLV: Threshold Limit Value
 LOD: Limit Of Detection
 OTV: Odour Threshold Value
 BCF: BioConcentration Factors
 BEI: Biological Exposure Index

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TEL (+61 3) 9572 4700.