Woodstikk PVA D3 Wood Adhesive (Aro-Bond DX5941)

Ureka Global Ltd

Chemwatch Hazard Alert Code: **2**

Version No: **3.6**
Safety data sheet according to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

Issue Date: **08/03/2023**
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S.REACH.GB.EN

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

1.1. Product Identifier

Product name	Woodstikk PVA D3 Wood Adhesive (Aro-Bond DX5941)
Chemical Name	Not Applicable
Synonyms	Not Available
Chemical formula	Not Applicable
Other means of identification	UFI:12FH-U08M-500D-9EUD

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

Chemical Product Category	PC1	Adhesives, sealants
Sectors of Use	SU3	Industrial uses: Uses of substances as such or in preparations* at industrial sites
Relevant identified uses	Use according to manufacturer's directions.	
Uses advised against	No specific uses advised against are identified.	

1.3. Details of the manufacturer or supplier of the safety data sheet

Registered company name	**Ureka Global Ltd**
Address	Unit 5 Decoypool Road, St Modwen Park, Newport, NP19 4RG United Kingdom
Telephone	+44 (0)117 971 1364
Fax	Not Available
Website	www.thenamethatsticks.com
Email	sales@thenamethatsticks.com

1.4. Emergency telephone number

Association / Organisation	**Not Available**
Emergency telephone numbers	Not Available
Other emergency telephone numbers	Not Available

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture

Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567 [1]	H319 - Serious Eye Damage/Eye Irritation Category 2
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567*

2.2. Label elements

Hazard pictogram(s)	

Signal word	**Warning**

Hazard statement(s)

H319	Causes serious eye irritation.

Supplementary Phrases

EUH208	Contains formaldehyde, 1,2-benzisothiazoline-3-one, 5-chloro-2-methyl-4-isothiazolin-3-one. May produce an allergic reaction.

Precautionary statement(s) Prevention

P280	Wear protective gloves, protective clothing, eye protection and face protection.
P264	Wash all exposed external body areas thoroughly after handling.

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.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

2.3. Other hazards

Cumulative effects may result following exposure*.

formaldehyde	Listed in the Europe Regulation (EC) No 1907/2006 - Annex XVII (Restrictions may apply)

SECTION 3 Composition / information on ingredients

3.1.Substances

See 'Composition on ingredients' in Section 3.2

3.2.Mixtures

1.CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	SCL / M-Factor	Nanoform Particle Characteristics
1.52-51-7 2.200-143-0 3.603-085-00-8 4.Not Available	<0.04	2-bromo-2-nitropropan-1,3-diol	Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 4, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 1, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3 , Hazardous to the Aquatic Environment Acute Hazard Category 1; H302, H312, H315, H318, H335, H400, Not Applicable [2]	M=10	Not Available
1.50-00-0 2.200-001-8 3.605-001-00-5 4.Not Available	<0.03	formaldehyde	Acute Toxicity (Oral) Category 3, Acute Toxicity (Dermal) Category 3, Acute Toxicity (Inhalation) Category 3, Skin Corrosion/Irritation Category 1B, Sensitisation (Skin) Category 1, Germ Cell Mutagenicity Category 2, Carcinogenicity Category 1B; H301, H311, H331, H314, H317, H341, H350, Not Applicable [2]	* Skin Corr. 1B; H314: C ≥ 25 % | Skin Irrit. 2; H315: 5 % ≤ C < 25 % | Eye Irrit. 2; H319: 5 % ≤ C < 25 % | STOT SE 3; H335: C ≥ 5 % | Skin Sens.; H317: C ≥ 0,2 %	Not Available
1.2634-33-5 2.220-120-9 3.613-088-00-6 4.Not Available	<0.02	1,2-benzisothiazoline-3-one	Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 1, Sensitisation (Skin) Category 1, Hazardous to the Aquatic Environment Acute Hazard Category 1; H302, H315, H318, H317, H400, Not Applicable [2]	Skin Sens. 1; H317: C ≥ 0,05 %	Not Available
1.55965-84-9 2.247-500-7 3.613-167-00-5 4.Not Available	<0.0015	5-chloro-2-methyl-4-isothiazolin-3-one	Acute Toxicity (Oral) Category 3, Acute Toxicity (Dermal) Category 2, Acute Toxicity (Inhalation) Category 2, Skin Corrosion/Irritation Category 1C, Serious Eye Damage/Eye Irritation Category 1, Sensitisation (Skin) Category 1A, Hazardous to the Aquatic Environment Acute Hazard Category 1, Hazardous to the Aquatic Environment Long-Term Hazard Category 1; H301, H310, H330, H314, H318, H317, H400, H410, Not Applicable [2]	Skin Corr. 1C; H314: C ≥ 0,6 % | Skin Irrit. 2; H315: 0,06 % ≤ C < 0,6 % | Eye Dam. 1; H318: C ≥ 0,6 % | Eye Irrit. 2; H319: 0,06 % ≤ C < 0,6 % | Skin Sens. 1A; H317: C ≥ 0,0015 % | M=100 | M=100	Not Available
1.124-17-4 2.204-685-9 3.Not Available 4.Not Available	1-5	diethylene glycol monobutyl ether acetate	EUH019 [1]	Not Available	Not Available

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1.CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classified according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	SCL / M-Factor	Nanoform Particle Characteristics
1.1327-41-9 2.215-477-2 3.Not Available 4.Not Available	1-5	aluminium hydroxide chloride	Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 1; H315, H319, H410, EUH201 [1]	Not Available	Not Available
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567; 3. Classification drawn from C&L; * EU IOELVs available; [e] Substance identified as having endocrine disrupting properties*				

SECTION 4 First aid measures

4.1. Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: ▸ Wash out immediately with fresh 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. ▸ Seek medical attention without delay; if pain persists or recurs 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 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	▸ Immediately give a glass of water. ▸ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substrate or mixture

5.3. Advice for firefighters

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

6.4. Reference to other sections

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

SECTION 7 Handling and storage

7.1. 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. ▸ **DO NOT** allow clothing wet with material to stay in contact with skin

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	▸ Polyethylene or polypropylene container.

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	▸ Packing as recommended by manufacturer. ▸ Check all containers are clearly labelled and free from leaks.
Hazard categories in accordance with Regulation (EC) No 1272/2008	Not Available
Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of	Not Available

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection

8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
2-bromo-2-nitropropan-1,3-diol	Dermal 2 mg/kg bw/day (Systemic, Chronic) Inhalation 3.5 mg/m³ (Systemic, Chronic) Dermal 8 µg/cm² (Local, Chronic) Inhalation 2.5 mg/m³ (Local, Chronic) Dermal 6 mg/kg bw/day (Systemic, Acute) Inhalation 10.5 mg/m³ (Systemic, Acute) Dermal 8 µg/cm² (Local, Acute) Inhalation 2.5 mg/m³ (Local, Acute) *Dermal 0.7 mg/kg bw/day (Systemic, Chronic) ** *Inhalation 0.6 mg/m³ (Systemic, Chronic) ** *Oral 0.18 mg/kg bw/day (Systemic, Chronic) ** *Dermal 4 µg/cm² (Local, Chronic) ** *Dermal 2.1 mg/kg bw/day (Systemic, Acute) ** *Inhalation 1.8 mg/m³ (Systemic, Acute) ** *Oral 0.5 mg/kg bw/day (Systemic, Acute) ** *Dermal 4 µg/cm² (Local, Acute) ** *Inhalation 0.6 mg/m³ (Local, Acute) **	0.01 mg/L (Water (Fresh)) 0.001 mg/L (Water - Intermittent release) 0.003 mg/L (Water (Marine)) 0.041 mg/kg sediment dw (Sediment (Fresh Water)) 0.003 mg/kg sediment dw (Sediment (Marine)) 0.5 mg/kg soil dw (Soil) 0.43 mg/L (STP)
formaldehyde	Dermal 240 mg/kg bw/day (Systemic, Chronic) Inhalation 9 mg/m³ (Systemic, Chronic) Dermal 37 µg/cm² (Local, Chronic) Inhalation 0.375 mg/m³ (Local, Chronic) Inhalation 0.75 mg/m³ (Local, Acute) *Dermal 102 mg/kg bw/day (Systemic, Chronic) ** *Inhalation 3.2 mg/m³ (Systemic, Chronic) ** *Oral 4.1 mg/kg bw/day (Systemic, Chronic) ** *Dermal 12 µg/cm² (Local, Chronic) ** *Inhalation 0.1 mg/m³ (Local, Chronic) **	0.44 mg/L (Water (Fresh)) 0.44 mg/L (Water - Intermittent release) 4.44 mg/L (Water (Marine)) 2.3 mg/kg sediment dw (Sediment (Fresh Water)) 2.3 mg/kg sediment dw (Sediment (Marine)) 0.2 mg/kg soil dw (Soil) 0.19 mg/L (STP)
1,2-benzisothiazoline-3-one	Dermal 0.966 mg/kg bw/day (Systemic, Chronic) Inhalation 6.81 mg/m³ (Systemic, Chronic) *Dermal 0.345 mg/kg bw/day (Systemic, Chronic) ** *Inhalation 1.2 mg/m³ (Systemic, Chronic) **	4.03 µg/L (Water (Fresh)) 0.403 µg/L (Water - Intermittent release) 1.1 µg/L (Water (Marine)) 49.9 µg/kg sediment dw (Sediment (Fresh Water)) 4.99 µg/kg sediment dw (Sediment (Marine)) 3 mg/kg soil dw (Soil) 1.03 mg/L (STP)
5-chloro-2-methyl-4-isothiazolin-3-one	Inhalation 0.02 mg/m³ (Local, Chronic) Inhalation 0.04 mg/m³ (Local, Acute) *Oral 0.09 mg/kg bw/day (Systemic, Chronic) ** *Inhalation 0.02 mg/m³ (Local, Chronic) ** *Oral 0.11 mg/kg bw/day (Systemic, Acute) ** *Inhalation 0.04 mg/m³ (Local, Acute) **	3.39 µg/L (Water (Fresh)) 3.39 µg/L (Water - Intermittent release) 3.39 µg/L (Water (Marine)) 0.027 mg/kg sediment dw (Sediment (Fresh Water)) 0.027 mg/kg sediment dw (Sediment (Marine)) 0.01 mg/kg soil dw (Soil) 0.23 mg/L (STP)
diethylene glycol monobutyl ether acetate	Dermal 100 mg/kg bw/day (Systemic, Chronic) *Dermal 60 mg/kg bw/day (Systemic, Chronic) ** *Oral 7.9 mg/kg bw/day (Systemic, Chronic) **	0.108 mg/L (Water (Fresh)) 0.011 mg/L (Water - Intermittent release) 0.6 mg/L (Water (Marine)) 0.8 mg/kg sediment dw (Sediment (Fresh Water)) 0.08 mg/kg sediment dw (Sediment (Marine)) 0.29 mg/kg soil dw (Soil) 100 mg/L (STP) 70 mg/kg food (Oral)
aluminium hydroxide chloride	Dermal 1.94 mg/kg bw/day (Systemic, Chronic) Inhalation 6.8 mg/m³ (Systemic, Chronic) *Dermal 0.97 mg/kg bw/day (Systemic, Chronic) ** *Inhalation 1.7 mg/m³ (Systemic, Chronic) ** *Oral 1.2 mg/kg bw/day (Systemic, Chronic) **	Not Available

* Values for General Population

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
UK Workplace Exposure Limits	formaldehyde	Formaldehyde	2 ppm / 2.5 mg/m3	2.5 mg/m3 / 2 ppm	Not Available	Carc

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
(WELs).						
UK Workplace Exposure Limits (WELs).	aluminium hydroxide chloride	Aluminium salts, soluble	2 mg/m3	Not Available	Not Available	Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
formaldehyde	Not Available	Not Available	Not Available
5-chloro-2-methyl-4-isothiazolin-3-one	0.6 mg/m3	6.6 mg/m3	40 mg/m3

Ingredient	Original IDLH	Revised IDLH
2-bromo-2-nitropropan-1,3-diol	Not Available	Not Available
formaldehyde	20 ppm	Not Available
1,2-benzisothiazoline-3-one	Not Available	Not Available
5-chloro-2-methyl-4-isothiazolin-3-one	Not Available	Not Available
diethylene glycol monobutyl ether acetate	Not Available	Not Available
aluminium hydroxide chloride	Not Available	Not Available

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
2-bromo-2-nitropropan-1,3-diol	E	≤ 0.01 mg/m³
1,2-benzisothiazoline-3-one	E	≤ 0.01 mg/m³
5-chloro-2-methyl-4-isothiazolin-3-one	E	≤ 0.01 mg/m³
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.*	

8.2. Exposure controls

8.2.1. Appropriate engineering 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.
8.2.2. Individual protection measures, such as personal protective equipment	
Eye and face protection	‣ Safety glasses with side shields. ‣ Chemical goggles. ‣ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.
Skin protection	See Hand protection below
Hands/feet protection	‣ Wear chemical protective gloves, e.g. PVC. ‣ Wear safety footwear or safety gumboots, e.g. Rubber The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. ‣ Butyl rubber gloves · Nitrile rubber gloves (Note: Nitric acid penetrates nitrile gloves in a few minutes.)
Body protection	See Other protection below
Other protection	‣ Overalls. ‣ P.V.C apron. ‣ Barrier cream.

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 ***computer-generated*** selection:
Woodstikk PVA D3 Wood Adhesive (Aro-Bond DX5941)

Material	CPI
BUTYL	A
NEOPRENE	A
NEOPRENE/NATURAL	A
NITRILE	A
PE	A
PE/EVAL/PE	A

Type BAX 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 10 x ES	BAX-AUS	-	BAX-PAPR-AUS / Class 1
up to 50 x ES	-	BAX-AUS / Class 1	-
up to 100 x ES	-	BAX-2	BAX-PAPR-2 ^

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PVC	A
TEFLON	A
VITON	A
NATURAL RUBBER	B
NATURAL+NEOPRENE	B

* CPI - Chemwatch Performance Index
A: Best Selection
B: Satisfactory; may degrade after 4 hours continuous immersion
C: Poor to Dangerous Choice for other than short term immersion
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.

^ - 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)

8.2.3. Environmental exposure controls

See section 12

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	White

Physical state	Liquid	**Relative density (Water = 1)**	Not Available
Odour	Characteristic	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	3-4	**Decomposition temperature (°C)**	Not Available
Freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	ca 100	**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 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	Not Available	**pH as a solution (1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available
Nanoform Solubility	Not Available	**Nanoform Particle Characteristics**	Not Available
Particle Size	Not Available		

9.2. Other information

Not Available

SECTION 10 Stability and reactivity

10.1.Reactivity	See section 7.2
10.2. Chemical stability	▸ Unstable in the presence of incompatible materials. ▸ Product is considered stable. ▸ Hazardous polymerisation will not occur.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 Toxicological information

11.1. 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. The material has **NOT** been classified by EC Directives or other classification systems as "harmful by inhalation". This is because of the lack of corroborating animal or human evidence.

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	Zirconium workers exposed to fume for 1-5 years showed no abnormalities due to zirconium. Animal studies also reveal a low order of hazard from inhaled zirconium.
Ingestion	51alum Because inorganic zirconium is poorly absorbed from the digestive tract, acute oral toxicity is low. Injection is much more dangerous, causing progressive depression until death. 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. Taken by mouth, isothiazolinones have moderate to high toxicity. The major signs of toxicity are severe stomach irritation, lethargy, and inco-ordination.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition 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. A 0.5% solution of 1,2-benzisothiazoline-3-one (BIT) is irritating to the skin. Even 0.05% can cause allergy, according to patch tests, with reddening of the skin. Provocation tests with BIT showed the material to be sensitizing. Solutions of isothiazolinones may be irritating or even damaging to the skin, depending on concentration. A concentration of over 0.1% can irritate, and over 0.5% can cause severe irritation. The external application of zirconium can cause nodules in the skin of the armpits. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions 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.
Eye	This material can cause eye irritation and damage in some persons. Solutions containing isothiazolinones may damage the mucous membranes and cornea. Animal testing showed very low concentrations (under 0.1%) did not cause irritation, while higher levels (3-5.5%) produced severe irritation and damage to the eye.
Chronic	Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. 55alum Zirconium can accumulate in the spleen. Oral administration has not been shown to cause any ill effects. In animal testing, 1,2-benzisothiazoline-3-one (BIT) did not cause toxicity to the embryo or birth defects. The material does not cause mutations or an increase in cancer. Mild anaemia, reduction in food intake and changes in organ weights did occur in a long-term study. The isothiazolinones are known contact sensitisers. Sensitisation is more likely with the chlorinated species as opposed to the non-chlorinated species.

Woodstikk PVA D3 Wood Adhesive (Aro-Bond DX5941)	
TOXICITY	**IRRITATION**
Not Available	Not Available

2-bromo-2-nitropropan-1,3-diol	
TOXICITY	**IRRITATION**
dermal (rat) LD50: ~1600 mg/kg[1]	Eye (rabbit): 5 mg
Inhalation(Rat) LC50: >0.12<1.14 mg/l4h[1]	Skin (human): 10 mg moderate
Oral (Rat) LD50: 180 mg/kg[2]	Skin (rabbit): 500 mg/24h mild
	Skin (rabbit): 80 mg moderate

formaldehyde	
TOXICITY	**IRRITATION**
Dermal (rabbit) LD50: 270 mg/kg[2]	Eye (human): 4 ppm/5m
Inhalation(Rat) LC50: <463 ppm4h[1]	Eye (rabbit): 0.75 mg/24H SEVERE
Oral (Rat) LD50: 100 mg/kg[2]	Eye: adverse effect observed (irritating)[1]
	Skin (human): 0.15 mg/3d-I mild
	Skin (rabbit): 2 mg/24H SEVERE
	Skin: adverse effect observed (corrosive)[1]

1,2-benzisothiazoline-3-one	
TOXICITY	**IRRITATION**
dermal (rat) LD50: >2000 mg/kg[1]	Eye: adverse effect observed (irreversible damage)[1]
Oral (Rat) LD50: 454 mg/kg[1]	Skin: no adverse effect observed (not irritating)[1]

5-chloro-2-methyl-4-isothiazolin-3-one	
TOXICITY	**IRRITATION**
dermal (rat) LD50: >1008 mg/kg[2]	Eye: adverse effect observed (irreversible damage)[1]
Inhalation(Rat) LC50: 1.23 mg/l4h[2]	Skin: adverse effect observed (corrosive)[1]
Oral (Rat) LD50: 53 mg/kg[2]	Skin: adverse effect observed (irritating)[1]

diethylene glycol monobutyl ether acetate	
TOXICITY	**IRRITATION**
Dermal (rabbit) LD50: 14500 mg/kg[2]	Eye (rabbit): 500 mg - moderate
Inhalation(Rat) LC50: 72.5 mg/L4h[2]	Eye: no adverse effect observed (not irritating)[1]
Oral (Rabbit) LD50; 2260 mg/kg[2]	Skin (rabbit): 500 mg (open)-mild
	Skin: no adverse effect observed (not irritating)[1]

aluminium hydroxide chloride	
TOXICITY	**IRRITATION**
dermal (rat) LD50: >2000 mg/kg[1]	Eye: no adverse effect observed (not irritating)[1]
Inhalation(Rat) LC50: >5 mg/l4h[1]	Skin: no adverse effect observed (not irritating)[1]

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	Oral (Rat) LD50: >300<2000 mg/kg[1]
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*

ALUMINIUM HYDROXIDE CHLORIDE	Oral (rat) LD50: 9187 mg/kg [Hoechst] Skin (human) 150 mg/3d-I Mild for RTEC No.: BD 0549500 for RTEC No.: BD 0550000 CAS RN: 12042-91-0 Substance [CAS RN 1327-41-9] has been investigated as a reproductive effector in rats. Aluminium compounds are widely used in antiperspirants without harmful effects to the skin Some people, however, are unusually sensitive to topically applied aluminium compounds. Skin irritation was reported in subjects following the application of aluminium chloride hexahydrate in ethanol used for the treatment of axillary or palmar hyperhidrosis (excessive sweating) or the use of a crystal deodorant containing alum Aluminium in antiperspirants is thought to work by (a) precipitating inside the eccrine sweat ducts as insoluble aluminium hydroxide, and (b) altering sweating by either a direct constrictor effect on the eccrine duct lumen or via an anticholinergic action. For cosmetic uses of aluminium, the majority would be applied in formulations where the aluminium would be insoluble, which means that very little of the applied aluminium might be bioaccessible for skin absorption. The notable exception being antiperspirants where the aluminium is soluble at low pH in the formulation,before being rendered insoluble as it is neutralised by the sweat on the skin s surface and within the sweat ducts. There are limited human data on the dermal absorption of aluminium. As cationic polymers possess unique physical structures and surface properties, various kinds of cationic polymers have been developed over the past few decades for a wide spectrum of nanomedical applications in the central nervous system (CNS). Although cationic polymers could be successfully used for gene transfer, drug delivery, and diagnostic imaging, after entering into the CNS, they may cause neurotoxicity and induce CNS damage, which seriously limits their applications. The neurotoxic effects of cationic polymers on CNS are mostly studied in mice, and have not been examined in detail. While evaluating the neurotoxicity of cationic polymers, the surface charge, surface area, coating, size, shape, and the basic materials that cationic polymers are made up of are expected to show important roles, and should be carefully considered. For aluminium compounds: Aluminium present in food and drinking water is poorly absorbed through the gastrointestinal tract. The bioavailability of aluminium is dependent on the form in which it is ingested and the presence of dietary constituents with which the metal cation can complex Ligands in food can have a marked effect on absorption of aluminium, as they can either enhance uptake by forming absorbable (usually water soluble) complexes (e.g., with carboxylic acids such as citric and lactic), or reduce it by forming insoluble compounds (e.g., with phosphate or dissolved silicate). Considering the available human and animal data it is likely that the oral absorption of aluminium can vary 10-fold based on chemical form alone. Although bioavailability appears to generally parallel water solubility, insufficient data are available to directly extrapolate from solubility in water to bioavailability. For oral intake from food, the European Food Safety Authority (EFSA) has derived a tolerable weekly intake (TWI) of 1 milligram (mg) of aluminium per kilogram of bodyweight.
Woodstikk PVA D3 Wood Adhesive (Aro-Bond DX5941) & 2-BROMO-2-NITROPROPAN-1,3-DIOL & FORMALDEHYDE & 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant.
2-BROMO-2-NITROPROPAN-1,3-DIOL & 5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE & DIETHYLENE GLYCOL MONOBUTYL ETHER ACETATE & ALUMINIUM HYDROXIDE CHLORIDE	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.

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*

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

11.2.2. Other information

See Section 11.1

SECTION 12 Ecological information

12.1. Toxicity

Woodstikk PVA D3 Wood Adhesive (Aro-Bond DX5941)

Endpoint	Test Duration (hr)	Species	Value	Source
Not Available	Not Available	Not Available	Not Available	Not Available

2-bromo-2-nitropropan-1,3-diol

Endpoint	Test Duration (hr)	Species	Value	Source
NOEC(ECx)	72h	Algae or other aquatic plants	0.01mg/l	2
LC50	96h	Fish	10.274-14.454mg/L	4

Continued...

	EC50	72h	Algae or other aquatic plants	0.05mg/l	2
	EC50	96h	Algae or other aquatic plants	0.02-0.025mg/L	4
	EC50	48h	Crustacea	1.1-3.52mg/L	4

formaldehyde					
	Endpoint	**Test Duration (hr)**	**Species**	**Value**	**Source**
	NOEC(ECx)	312h	Crustacea	0.005mg/l	4
	LC50	96h	Fish	0.727-9.193mg/l	4
	EC50	72h	Algae or other aquatic plants	1.034-1.984mg/l	4
	EC50	96h	Algae or other aquatic plants	0.375-0.579mg/l	4
	EC50	48h	Crustacea	3.26mg/l	4

1,2-benzisothiazoline-3-one					
	Endpoint	**Test Duration (hr)**	**Species**	**Value**	**Source**
	NOEC(ECx)	72h	Algae or other aquatic plants	0.0403mg/l	2
	EC50	72h	Algae or other aquatic plants	0.07mg/l	2
	LC50	96h	Fish	0.067-0.29mg/L	4
	EC50	48h	Crustacea	0.097mg/L	4

5-chloro-2-methyl-4-isothiazolin-3-one					
	Endpoint	**Test Duration (hr)**	**Species**	**Value**	**Source**
	NOEC(ECx)	504h	Crustacea	0.172mg/l	1
	EC50	96h	Algae or other aquatic plants	0.03-0.13mg/L	4
	EC50	72h	Algae or other aquatic plants	0.018-0.026mg/L	4
	LC50	96h	Fish	0.13-0.31mg/L	4
	EC50	48h	Crustacea	4.71mg/l	1

diethylene glycol monobutyl ether acetate					
	Endpoint	**Test Duration (hr)**	**Species**	**Value**	**Source**
	LC50	96h	Fish	50mg/l	1
	EC50	72h	Algae or other aquatic plants	>500mg/l	2
	EC10(ECx)	168h	Crustacea	10.84mg/l	2
	EC50	96h	Algae or other aquatic plants	75mg/l	2

aluminium hydroxide chloride					
	Endpoint	**Test Duration (hr)**	**Species**	**Value**	**Source**
	LC50	96h	Fish	3.1mg/l	Not Available
	EC50	72h	Algae or other aquatic plants	0.0169mg/l	2
	EC50	48h	Crustacea	0.33mg/l	2
	EC10(ECx)	72h	Algae or other aquatic plants	0.000203mg/l	2
	EC50	96h	Algae or other aquatic plants	0.0054mg/l	2

Legend:	*Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 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*

For Metal:
Atmospheric Fate - Metal-containing inorganic substances generally have negligible vapour pressure and are not expected to partition to air.
Environmental Fate: Environmental processes, such as oxidation, the presence of acids or bases and microbiological processes, may transform insoluble metals to more soluble ionic forms. Environmental processes may enhance bioavailability and may also be important in changing solubilities.
Speciation of arsenic is an important consideration in the fate, movement, and action of this substance. Chemical and biochemical transformations of arsenic include oxidation, reduction and methylation which affects its volatilisation, adsorption, dissolution and biological disposition. The transport of arsenic in the environment is largely controlled by absorption/desorption processes in soils and sediments.
Soluble salts of zirconium are moderately toxic to algae and fish. Zirconium is more toxic in soft water than in hard water. The toxicity of zirconium salts and zirconium complexes with organic acids are expected to be related to their water solubilities and their octanol/ water partition coefficient (Kow).
Environmental Fate: Isothiazolinones are antimicrobials used to control bacteria, fungi, and for wood preservation and antifouling agents. They are frequently used in personal care products such as shampoos and other hair care products, as well as certain paint formulations. The most common isothiazolinone combinations are 5-chloro-2-methyl-4-isothiazolin-3-one, (CMI), and 2-methyl-4-isothiazolin-3-one, (MI).
For Formaldehyde:
Environmental Fate: Formaldehyde is common in the environment as a contaminant of smoke and as photochemical smog. Concentrated solutions containing formaldehyde are unstable and oxidize slowly. In the presence of air and moisture, polymerization takes place readily in concentrated solutions at room temperature to form paraformaldehyde.
For 2-bromo-2-nitropropan-1,3-diol (Bronopol)
Environmental fate:
One hydrolysis study indicates that bronopol appears to hydrolyse slowly at acidic or neutral pH conditions. Bronopol decomposes in aqueous solution on exposure to light. Increases in temperature increase decomposition.
DO NOT discharge into sewer or waterways.

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
2-bromo-2-nitropropan-1,3-diol	LOW	LOW
formaldehyde	LOW (Half-life = 14 days)	LOW (Half-life = 2.97 days)
5-chloro-2-methyl-4-isothiazolin-3-one	HIGH	HIGH

Continued...

Ingredient	Persistence: Water/Soil	Persistence: Air
diethylene glycol monobutyl ether acetate	LOW	LOW

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
2-bromo-2-nitropropan-1,3-diol	LOW (LogKOW = -0.6408)
formaldehyde	LOW (LogKOW = 0.35)
5-chloro-2-methyl-4-isothiazolin-3-one	LOW (LogKOW = 0.0444)
diethylene glycol monobutyl ether acetate	LOW (LogKOW = 1.2976)

12.4. Mobility in soil

Ingredient	Mobility
2-bromo-2-nitropropan-1,3-diol	HIGH (KOC = 1)
formaldehyde	HIGH (KOC = 1)
5-chloro-2-methyl-4-isothiazolin-3-one	LOW (KOC = 45.15)
diethylene glycol monobutyl ether acetate	LOW (KOC = 10)

12.5. Results of PBT and vPvB assessment

	P	B	T
Relevant available data	Not Available	Not Available	Not Available
PBT	✗	✗	✗
vPvB	✗	✗	✗

PBT Criteria fulfilled?	No
vPvB	No

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

12.7. Other adverse effects

One or more ingredients within this SDS has the potential of causing ozone depletion and/or photochemical ozone creation.

SECTION 13 Disposal considerations

13.1. Waste treatment methods

Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. ▸ **DO NOT** allow wash water from cleaning or process equipment to enter drains. ▸ It may be necessary to collect all wash water for treatment before disposal. ▸ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. ▸ 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 licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material).
Waste treatment options	Not Available
Sewage disposal options	Not Available

SECTION 14 Transport information

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

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

14.1. **UN number or ID number**	Not Applicable
14.2. **UN proper shipping name**	Not Applicable
14.3. **Transport hazard class(es)**	Class: Not Applicable Subsidiary risk: Not Applicable

Continued...

14.4. **Packing group**	Not Applicable
14.5. **Environmental hazard**	Not Applicable
14.6. **Special precautions for user**	Hazard identification (Kemler): Not Applicable Classification code: Not Applicable Hazard Label: Not Applicable Special provisions: Not Applicable Limited quantity: Not Applicable Tunnel Restriction Code: Not Applicable

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

14.1. **UN number**	Not Applicable
14.2. **UN proper shipping name**	Not Applicable
14.3. **Transport hazard class(es)**	ICAO/IATA Class: Not Applicable ICAO / IATA Subrisk: Not Applicable ERG Code: Not Applicable
14.4. **Packing group**	Not Applicable
14.5. **Environmental hazard**	Not Applicable
14.6. **Special precautions for user**	Special provisions: Not Applicable Cargo Only Packing Instructions: Not Applicable Cargo Only Maximum Qty / Pack: Not Applicable Passenger and Cargo Packing Instructions: Not Applicable Passenger and Cargo Maximum Qty / Pack: Not Applicable Passenger and Cargo Limited Quantity Packing Instructions: Not Applicable Passenger and Cargo Limited Maximum Qty / Pack: Not Applicable

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

14.1. **UN number**	Not Applicable
14.2. **UN proper shipping name**	Not Applicable
14.3. **Transport hazard class(es)**	IMDG Class: Not Applicable IMDG Subrisk: Not Applicable
14.4. **Packing group**	Not Applicable
14.5. **Environmental hazard**	Not Applicable
14.6. **Special precautions for user**	EMS Number: Not Applicable Special provisions: Not Applicable Limited Quantities: Not Applicable

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. **UN number**	Not Applicable
14.2. **UN proper shipping name**	Not Applicable
14.3. **Transport hazard class(es)**	Not Applicable: Not Applicable
14.4. **Packing group**	Not Applicable
14.5. **Environmental hazard**	Not Applicable
14.6. **Special precautions for user**	Classification code: Not Applicable Special provisions: Not Applicable Limited quantity: Not Applicable Equipment required: Not Applicable Fire cones number: Not Applicable

14.7. Maritime transport in bulk according to IMO instruments

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

Not Applicable

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

Continued...

Product name	Group
2-bromo-2-nitropropan-1,3-diol	Not Available
formaldehyde	Not Available
1,2-benzisothiazoline-3-one	Not Available
5-chloro-2-methyl-4-isothiazolin-3-one	Not Available
diethylene glycol monobutyl ether acetate	Not Available
aluminium hydroxide chloride	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
2-bromo-2-nitropropan-1,3-diol	Not Available
formaldehyde	Not Available
1,2-benzisothiazoline-3-one	Not Available
5-chloro-2-methyl-4-isothiazolin-3-one	Not Available
diethylene glycol monobutyl ether acetate	Not Available
aluminium hydroxide chloride	Not Available

SECTION 15 Regulatory information

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

2-bromo-2-nitropropan-1,3-diol is found on the following regulatory lists

Great Britain GB Biocidal Active Substances
Great Britain GB mandatory classification and labelling list (GB MCL)

formaldehyde is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List
Great Britain GB Biocidal Active Substances
Great Britain GB mandatory classification and labelling list (GB MCL)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans
UK REACH grandfathered registrations notified substances list
UK Workplace Exposure Limits (WELs).

1,2-benzisothiazoline-3-one is found on the following regulatory lists

Great Britain GB Biocidal Active Substances
Great Britain GB mandatory classification and labelling list (GB MCL)

5-chloro-2-methyl-4-isothiazolin-3-one is found on the following regulatory lists

Great Britain GB Biocidal Active Substances
Great Britain GB mandatory classification and labelling list (GB MCL)

diethylene glycol monobutyl ether acetate is found on the following regulatory lists

UK REACH grandfathered registrations notified substances list

aluminium hydroxide chloride is found on the following regulatory lists

Great Britain GB Biocidal Active Substances
UK Workplace Exposure Limits (WELs).
UK REACH grandfathered registrations notified substances list

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

Information according to 2012/18/EU (Seveso III):

Seveso Category	Not Available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

ECHA SUMMARY

Ingredient	CAS number	Index No	ECHA Dossier
2-bromo-2-nitropropan-1,3-diol	52-51-7	603-085-00-8	Not Available

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Acute Tox. 4; Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; Aquatic Acute 1	GHS05; GHS09; Dgr	H302; H312; H315; H318; H335; H400
2	Skin Irrit. 2; Eye Dam. 1; STOT SE 3; Aquatic Acute 1; Acute Tox. 3; Flam. Sol. 2; Self-react. C; Acute Tox. 2; Acute Tox. 2; Aquatic Chronic 1	GHS05; GHS09; Dgr; GHS06; GHS02	H315; H318; H335; H400; H301; H410; H228; H242; H310; H330

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
formaldehyde	50-00-0	605-001-00-5	Not Available

Continued...

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Acute Tox. 3; Acute Tox. 3; Skin Corr. 1B; Skin Sens. 1; Eye Dam. 1; Acute Tox. 3; Carc. 2	GHS08; GHS05; GHS06; Dgr	H301; H311; H314; H317; H331; H351
2	Skin Sens. 1A; Acute Tox. 2; Acute Tox. 3; Skin Corr. 1A; Eye Dam. 1; Muta. 2; Carc. 1A; STOT SE 3; Flam. Liq. 3; Flam. Gas 1; Liq.; Resp. Sens. 1; STOT SE 1; STOT RE 1; Met. Corr. 1; Acute Tox. 2; Aquatic Acute 1; Aquatic Chronic 1	GHS06; Dgr; GHS08; GHS05; GHS09; GHS01	H317; H330; H301; H314; H341; H350; H318; H335; H226; H220; H280; H334; H370; H372; H336; H290; H400; H310; H410

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
1,2-benzisothiazoline-3-one	2634-33-5	613-088-00-6	Not Available

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1; Eye Dam. 1; Aquatic Acute 1	GHS05; GHS09; Dgr	H302; H315; H317; H318; H400
2	Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1A; Eye Dam. 1; Aquatic Acute 1; Acute Tox. 1; Aquatic Chronic 1	GHS09; GHS05; Dgr; GHS06; GHS08	H302; H315; H317; H318; H400; H330; H410

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
5-chloro-2-methyl-4-isothiazolin-3-one	55965-84-9	613-167-00-5	Not Available

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Acute Tox. 2; Acute Tox. 2; Skin Corr. 1B; Skin Sens. 1; Eye Dam. 1; Acute Tox. 2; Aquatic Acute 1	GHS08; GHS09; GHS06; Dgr	H300; H310; H314; H317; H318; H330; H400
2	Acute Tox. 1; Acute Tox. 1; Skin Corr. 1B; Skin Sens. 1A; Eye Dam. 1; Acute Tox. 1; Aquatic Acute 1; other:nose; Aquatic Chronic 1; Flam. Liq. 3; STOT SE 1; Resp. Sens. 1	GHS08; GHS09; GHS06; Dgr; GHS05; GHS02	H300; H310; H314; H317; H318; H330; H400; H335; H410; H226; H334; H370
1	Acute Tox. 3; Acute Tox. 3; Skin Corr. 1B; Skin Sens. 1; Acute Tox. 3; Aquatic Acute 1; Aquatic Chronic 1	GHS05; GHS09; GHS06; Dgr	H301; H311; H314; H317; H331; H410
2	Acute Tox. 3; Skin Corr. 1A; Skin Sens. 1A; Aquatic Acute 1; Aquatic Chronic 1; Eye Dam. 1; Acute Tox. 2; Acute Tox. 1; STOT SE 3; Met. Corr. 1	GHS05; GHS09; GHS06; Dgr; GHS08	H301; H314; H317; H410; H318; H400; H310; H330; H335; H290; H334

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
diethylene glycol monobutyl ether acetate	124-17-4	Not Available	Not Available

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Not Classified	Not Available	Not Available
2	Skin Irrit. 2; Skin Sens. 1; Eye Irrit. 2; STOT SE 3; Resp. Sens. 1; Aquatic Chronic 4	GHS07; Dgr	H315; H317; H319; H335; H334; H413

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

Ingredient	CAS number	Index No	ECHA Dossier
aluminium hydroxide chloride	1327-41-9	Not Available	Not Available

Harmonisation (C&L Inventory)	Hazard Class and Category Code(s)	Pictograms Signal Word Code(s)	Hazard Statement Code(s)
1	Not Classified	Not Available	Not Available
2	Met. Corr. 1; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3	GHS05; Wng	H290; H315; H319; H335
1	Met. Corr. 1; Eye Dam. 1	GHS05; Dgr	H290; H318
2	Met. Corr. 1; Eye Dam. 1; Acute Tox. 4; Skin Corr. 1A; Aquatic Chronic 2	GHS05; Dgr; GHS09	H290; H318; H302; H314; H411

Harmonisation Code 1 = The most prevalent classification. Harmonisation Code 2 = The most severe classification.

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (2-bromo-2-nitropropan-1,3-diol; formaldehyde; 1,2-benzisothiazoline-3-one; 5-chloro-2-methyl-4-isothiazolin-3-one; diethylene glycol monobutyl ether acetate; aluminium hydroxide chloride)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes

Continued...

National Inventory	Status
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes
Legend:	*Yes = All CAS declared ingredients are on the inventory* *No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.*

SECTION 16 Other information

Revision Date	08/03/2023
Initial Date	25/05/2022

Full text Risk and Hazard codes

H220	Extremely flammable gas.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H242	Heating may cause a fire.
H280	Contains gas under pressure; may explode if heated.
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

SDS Version Summary

Version	Date of Update	Sections Updated
2.6	08/03/2023	Hazards identification - Classification, Composition / information on ingredients - Ingredients

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.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:
EN 166 Personal eye-protection
EN 340 Protective clothing
EN 374 Protective gloves against chemicals and micro-organisms

Continued...

EN 13832 Footwear protecting against chemicals
EN 133 Respiratory protective devices

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
ES: Exposure Standard
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
AIIC: Australian Inventory of Industrial Chemicals
DSL: Domestic Substances List
NDSL: Non-Domestic Substances List
IECSC: Inventory of Existing Chemical Substance in China
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European List of Notified Chemical Substances
NLP: No-Longer Polymers
ENCS: Existing and New Chemical Substances Inventory
KECI: Korea Existing Chemicals Inventory
NZIoC: New Zealand Inventory of Chemicals
PICCS: Philippine Inventory of Chemicals and Chemical Substances
TSCA: Toxic Substances Control Act
TCSI: Taiwan Chemical Substance Inventory
INSQ: Inventario Nacional de Sustancias Químicas
NCI: National Chemical Inventory
FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	Classification Procedure
Serious Eye Damage/Eye Irritation Category 2, H319	On basis of test data
, EUH208	Calculation method

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