ALSPEC D60

Aluminium Specialities Pty Ltd

Version No: **2.1**
Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Issue Date: **11/01/2023**
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S.GHS.AUS.EN

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

Product Identifier

Product name	ALSPEC D60
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 Paste used to seal gaps/ joints Use according to manufacturer's directions.

Details of the manufacturer or supplier of the safety data sheet

Registered company name	**Aluminium Specialities Pty Ltd**
Address	3, Alspec Place, Eastern Creek NSW 2768 Australia
Telephone	+61 298349500
Fax	02 98349533
Website	Not Available
Email	Info@alspec.com.au

Emergency telephone number

Association / Organisation	**Aluminium Specialities Pty Ltd**	**CHEMWATCH EMERGENCY RESPONSE**
Emergency telephone numbers	**+61 298349500**	**+61 1800 951 288**
Other emergency telephone numbers	**Not Available**	**+61 3 9573 3188**

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.

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

Label elements

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

Hazard statement(s)

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H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Precautionary statement(s) Prevention

P280	Wear protective gloves, protective clothing, eye protection and face protection.
P261	Avoid breathing mist/vapours/spray.
P264	Wash all exposed external body areas thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
22984-54-9	1-3	methyltri(methylethylketoxime)silane
2224-33-1	1-3	vinyltris(methylethylketoxime)silane
1760-24-3	0.3-1	N-[3-(trimethoxysilyl)propyl]ethylenediamine
540-97-6	0.1-0.3	dodecamethylcyclohexasiloxane
556-67-2	0.1-0.3	octamethylcyclotetrasiloxane
96-29-7	<1	methyl ethyl ketoxime
Legend:	*1. Classification by vendor; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L; * EU IOELVs available*	

SECTION 4 First aid measures

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, 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

- 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	▸ 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	▸ The material is not readily combustible under normal conditions. ▸ However, it will break down under fire conditions and the organic component may burn. ▸ Not considered to be a significant fire risk. ▸ Heat may cause expansion or decomposition with violent rupture of containers. Decomposes on heating and produces: carbon monoxide (CO) carbon dioxide (CO_2) nitrogen oxides (NOx) silicon dioxide (SiO_2) other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes.
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	▸ Clean up all spills immediately. ▸ Avoid contact with skin and eyes. ▸ Wear impervious gloves and safety goggles. ▸ Trowel up/scrape up.
Major Spills	▸ Clear area of personnel and move upwind. ▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ Wear full body protective clothing with breathing apparatus. ▸ Prevent, by all means available, spillage from entering drains or water courses.

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

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling	▸ Avoid all personal contact, including inhalation. ▸ Wear protective clothing when risk of exposure occurs. ▸ Use in a well-ventilated area. ▸ Prevent concentration in hollows and sumps.
Other information	▸ Store in original containers. ▸ Keep containers securely sealed. ▸ Store in a cool, dry, well-ventilated area. ▸ Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container	▸ Metal can or drum ▸ Packaging as recommended by manufacturer. ▸ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	▸ Avoid strong acids, bases. ▸ Avoid reaction with oxidising agents

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not Available

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
N-[3-(trimethoxysilyl)propyl]ethylenediamine	23 mg/m3	250 mg/m3	1,500 mg/m3
dodecamethylcyclohexasiloxane	150 mg/m3	1,700 mg/m3	9,900 mg/m3
octamethylcyclotetrasiloxane	30 ppm	68 ppm	130 ppm
methyl ethyl ketoxime	30 ppm	56 ppm	250 ppm

Ingredient	Original IDLH	Revised IDLH

Continued...

Ingredient	Original IDLH	Revised IDLH
methyltri(methylethylketoxime)silane	Not Available	Not Available
vinyltris(methylethylketoxime)silane	Not Available	Not Available
N-[3-(trimethoxysilyl)propyl]ethylenediamine	Not Available	Not Available
dodecamethylcyclohexasiloxane	Not Available	Not Available
octamethylcyclotetrasiloxane	Not Available	Not Available
methyl ethyl ketoxime	Not Available	Not Available

Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
methyltri(methylethylketoxime)silane	D	> 0.1 to ≤ 1 ppm
vinyltris(methylethylketoxime)silane	D	> 0.1 to ≤ 1 ppm
N-[3-(trimethoxysilyl)propyl]ethylenediamine	D	> 0.1 to ≤ 1 ppm
octamethylcyclotetrasiloxane	E	≤ 0.1 ppm
methyl ethyl ketoxime	D	> 0.1 to ≤ 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.*	

Exposure controls

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. 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.
Personal protection	
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. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
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 **NOTE:** ▸ The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. ▸ Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.
Body protection	See Other protection below
Other protection	▸ Protective overalls, closely fitted at neck and wrist. ▸ Eye-wash unit. **IN CONFINED SPACES:** ▸ Non-sparking protective boots ▸ Static-free clothing. ▸ Ensure availability of lifeline.

Respiratory protection

Type A-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	A-AUS / Class1 P2	-
up to 50	1000	-	A-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	A-2 P2
up to 100	10000	-	A-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)

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- 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	Translucent Paste with characteristic oxime odour; not miscible with water,

Physical state	Non Slump Paste	**Relative density (Water = 1)**	1.03
Odour	Characteristic	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Applicable	**Decomposition temperature (°C)**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Applicable
Flash point (°C)	70 (CC) (Does not sustain combustio)	**Taste**	Not Available
Evaporation rate	<1 BuAC = 1	**Explosive properties**	Not Available
Flammability	Combustible.	**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 Available
Vapour density (Air = 1)	>1	**VOC g/L**	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	Product is considered stable and 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	Although inhalation is not thought to produce harmful effects (as classified under EC Directives), the material may still produce health damage, especially where pre-existing organ (e.g. liver, kidney) damage is evident.
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	The material may accentuate any pre-existing dermatitis condition 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.
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

ALSPEC D60	**TOXICITY**	**IRRITATION**
	Not Available	Not Available
methyltri(methylethylketoxime)silane	**TOXICITY**	**IRRITATION**
	dermal (rat) LD50: >2000 mg/kg[1]	Eye: adverse effect observed (irritating)[1]
	Oral (Rat) LD50: 2453 mg/kg[1]	Skin: no adverse effect observed (not irritating)[1]
vinyltris(methylethylketoxime)silane	**TOXICITY**	**IRRITATION**
	dermal (rat) LD50: >2009 mg/kg[1]	Eye: adverse effect observed (irritating)[1]

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	Oral (Rat) LD50: >2000 mg/kg[1]	Skin: no adverse effect observed (not irritating)[1]
N-[3-(trimethoxysilyl)propyl]ethylenediamine	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: >2000 mg/kg[1]	Eye (rabbit): 15 mg SEVERE
	Inhalation(Rat) LC50: >1.49<2.44 mg/l4h[1]	Eye: adverse effect observed (irreversible damage)[1]
	Oral (Rat) LD50: 1897 mg/kg[1]	Skin (rabbit): 500 mg mild
		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]
octamethylcyclotetrasiloxane	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: 754.3 mg/kg[2]	Eye (rabbit): 500 mg/24h - mild
	Inhalation(Rat) LC50: 36 mg/l4h[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]
methyl ethyl ketoxime	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: >184<1840 mg/kg[1]	Eye (rabbit): 0.1 ml - SEVERE
	Inhalation(Rat) LC50: >4.83 mg/l4h[1]	
	Oral (Rat) LD50: >900 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*

N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE	Allergic reactions involving the respiratory tract are usually due to interactions between IgE antibodies and allergens and occur rapidly. Allergic potential of the allergen and period of exposure often determine the severity of symptoms. Some people may be genetically more prone than others, and exposure to other irritants may aggravate symptoms. Allergy causing activity is due to interactions with proteins. Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal inflammation, asthma and eczema. Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure. For N-[3-(trimethoxysilyl)propyl]-ethylenediamine (AEAPTMS) and its analogues: Animal testing shows that AEAPTMS is moderately irritating to (and can sensitise) the skin and severely irritating to the eyes. It also causes salivation and laboured breathing. There is no evidence that AEAPTMS causes genetic damage or reproductive or developmental toxicity to date. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. 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. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.
OCTAMETHYLCYCLOTETRASILOXANE	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: 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. 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

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	accumulation in the liver. The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
METHYL ETHYL KETOXIME	Mammalian lymphocyte mutagen *Huls Canada ** Merck For methyl ethyl ketoxime (MEKO): At medium to high concentrations, MEKO increased the rate of liver tumours in animal testing. This seems to be due to the breakdown of MEKO into a cancer-causing substance, and occurred more often in males. MEKO does not seem to cause mutations. Repeated exposure appeared to cause effects on the nose, spleen, liver, kidney and blood.
METHYLTRI(METHYLETHYLKETOXIME)SILANE & VINYLTRIS(METHYLETHYLKETOXIME)SILANE & N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE & METHYL ETHYL KETOXIME	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.
METHYLTRI(METHYLETHYLKETOXIME)SILANE & VINYLTRIS(METHYLETHYLKETOXIME)SILANE	alpha,beta-Unsaturated oximes represent two previously unknown classes of prohaptens.Three putative metabolites were proposed as sensitising agents. These included two diastereometric alpha,beta-epoxy oximes and a nitro analogue. When tested in the LLNA,alpha,beta-epoxy oximes. Allergic Contact Dermatitis—Formation, Structural Requirements,and Reactivity of Skin Sensitizers. Ann-Therese Karlberg et al: Chem. Res.
METHYLTRI(METHYLETHYLKETOXIME)SILANE & VINYLTRIS(METHYLETHYLKETOXIME)SILANE & N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE & OCTAMETHYLCYCLOTETRASILOXANE	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.
VINYLTRIS(METHYLETHYLKETOXIME)SILANE & DODECAMETHYLCYCLOHEXASILOXANE	No significant acute toxicological data identified in literature search.

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

ALSPEC D60

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

methyltri(methylethylketoxime)silane

Endpoint	Test Duration (hr)	Species	Value	Source
NOEC(ECx)	72h	Algae or other aquatic plants	1mg/l	2
EC50	72h	Algae or other aquatic plants	6.1mg/l	2
LC50	96h	Fish	>100mg/l	2
EC50	48h	Crustacea	201mg/l	2

vinyltris(methylethylketoxime)silane

Endpoint	Test Duration (hr)	Species	Value	Source
NOEC(ECx)	72h	Algae or other aquatic plants	1mg/l	2
EC50	72h	Algae or other aquatic plants	6.1mg/l	2
LC50	96h	Fish	>100mg/l	2
EC50	48h	Crustacea	201mg/l	2

N-[3-(trimethoxysilyl)propyl]ethylenediamine

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96h	Fish	597mg/l	2
EC50	72h	Algae or other aquatic plants	5.5mg/l	2
EC50	96h	Algae or other aquatic plants	11mg/l	2
EC50	48h	Crustacea	81mg/l	2
NOEC(ECx)	72h	Fish	1.6mg/l	2

dodecamethylcyclohexasiloxane

Endpoint	Test Duration (hr)	Species	Value	Source
NOEC(ECx)	72h	Algae or other aquatic plants	>=0.002mg/l	2
EC50	72h	Algae or other aquatic plants	>0.002mg/l	2

octamethylcyclotetrasiloxane

Endpoint	Test Duration (hr)	Species	Value	Source
NOEC(ECx)	96h	Algae or other aquatic plants	<0.001-0.029mg/l	4
LC50	96h	Fish	>0.0063mg/l	2
EC50	96h	Algae or other aquatic plants	>0.022mg/l	2
EC50	48h	Crustacea	>0.015mg/l	2

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	Endpoint	Test Duration (hr)	Species	Value	Source
methyl ethyl ketoxime	BCF	1008h	Fish	0.5-0.6	7
	NOEC(ECx)	72h	Algae or other aquatic plants	~1.02mg/l	2
	EC50	72h	Algae or other aquatic plants	~6.09mg/l	2
	EC50	48h	Crustacea	~201mg/l	2
	LC50	96h	Fish	>100mg/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*

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
methyltri(methylethylketoxime)silane	HIGH	HIGH
N-[3-(trimethoxysilyl)propyl]ethylenediamine	HIGH	HIGH
dodecamethylcyclohexasiloxane	HIGH	HIGH
octamethylcyclotetrasiloxane	HIGH	HIGH
methyl ethyl ketoxime	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
methyltri(methylethylketoxime)silane	LOW (LogKOW = 7.8316)
N-[3-(trimethoxysilyl)propyl]ethylenediamine	LOW (LogKOW = -1.6744)
dodecamethylcyclohexasiloxane	HIGH (LogKOW = 6.3286)
octamethylcyclotetrasiloxane	HIGH (BCF = 12400)
methyl ethyl ketoxime	LOW (BCF = 5.8)

Mobility in soil

Ingredient	Mobility
methyltri(methylethylketoxime)silane	LOW (KOC = 590900)
N-[3-(trimethoxysilyl)propyl]ethylenediamine	LOW (KOC = 6856)
dodecamethylcyclohexasiloxane	LOW (KOC = 1174000)
octamethylcyclotetrasiloxane	LOW (KOC = 17960)
methyl ethyl ketoxime	LOW (KOC = 130.8)

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal	▸ 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.

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
methyltri(methylethylketoxime)silane	Not Available
vinyltris(methylethylketoxime)silane	Not Available
N-[3-(trimethoxysilyl)propyl]ethylenediamine	Not Available
dodecamethylcyclohexasiloxane	Not Available

Continued...

Product name	Group
octamethylcyclotetrasiloxane	Not Available
methyl ethyl ketoxime	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
methyltri(methylethylketoxime)silane	Not Available
vinyltris(methylethylketoxime)silane	Not Available
N-[3-(trimethoxysilyl)propyl]ethylenediamine	Not Available
dodecamethylcyclohexasiloxane	Not Available
octamethylcyclotetrasiloxane	Not Available
methyl ethyl ketoxime	Not Available

SECTION 15 Regulatory information

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

methyltri(methylethylketoxime)silane is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

vinyltris(methylethylketoxime)silane is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

N-[3-(trimethoxysilyl)propyl]ethylenediamine is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

dodecamethylcyclohexasiloxane 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 | Chemical Footprint Project - Chemicals of High Concern List
Australian Inventory of Industrial Chemicals (AIIC)

methyl ethyl ketoxime is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals | Australian Inventory of Industrial Chemicals (AIIC)
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6 | Chemical Footprint Project - Chemicals of High Concern List

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (methyltri(methylethylketoxime)silane; vinyltris(methylethylketoxime)silane; N-[3-(trimethoxysilyl)propyl]ethylenediamine; dodecamethylcyclohexasiloxane; octamethylcyclotetrasiloxane; methyl ethyl ketoxime)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (methyltri(methylethylketoxime)silane; vinyltris(methylethylketoxime)silane; N-[3-(trimethoxysilyl)propyl]ethylenediamine; dodecamethylcyclohexasiloxane)
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	11/01/2023
Initial Date	11/01/2023

Other information

Continued...

Classification of the preparation and its individual components has drawn on official and authoritative sources 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
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