

# Chemtools Pty Ltd

Chemwatch Hazard Alert Code: 4 Chemwatch: 5632-54 Issue Date: 05/10/2023 Version No: 2.1 Print Date: 06/10/2023 Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements S.GHS.AUS/NZ.EN.E Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

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

#### **Product Identifier**

Product name	DEOX R31 Solid Film Lubricant (Aerosol)
Chemical Name	Not Applicable
Proper shipping name	AEROSOLS
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	Application is by spray atomisation from a hand held aerosol pack
Relevant Identified uses	Use according to manufacturer's directions.

## Details of the manufacturer or supplier of the safety data sheet

Registered company name	Chemtools Pty Ltd	Chemtools Pty Ltd
Address	Unit 2, 14 - 16 Lee Holm Road St Marys NSW 2760 Australia	15/62 Factory Road Belfast Christchurch 8051 New Zealand
Telephone	1300 738 250, +61 2 9833 9766	+64 9 940 2745
Fax	+61 2 9623 3670	+61 2 9623 3670
Website	www.chemtools.com.au	www.chemtools.co.nz
Email	sales@chemtools.com.au	sales@chemtools.com.au

#### **Emergency telephone number**

Association / Organisation	Poisons Information Centre	National Poisons Centre
Emergency telephone numbers	13 11 26	0800 764 766
Other emergency telephone numbers	Not Available	Not Available

## **SECTION 2 Hazards identification**

#### Classification of the substance or mixture

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

Poisons Schedule	Not Applicable
Classification <sup>[1]</sup>	Aerosols Category 1, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Carcinogenicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment Acute Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 -

Annex VI

## Label elements



Signal word Danger

#### Hazard statement(s)

AUH044	Risk of explosion if heated under confinement.
H222+H229	Extremely flammable aerosol. Pressurized container: may burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H402	Harmful to aquatic life.

#### Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P273	Avoid release to the environment.
P264	Wash all exposed external body areas thoroughly after handling.

## Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/ attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

## Precautionary statement(s) Storage

P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

## Precautionary statement(s) Disposal

P501

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

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

#### NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification <sup>[1]</sup>	Aerosols Category 1, Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Carcinogenicity Category 2, Reproductive Toxicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	2.1.2A, 6.1D (oral), 6.3A, 6.4A, 6.7B, 6.8B, 6.9B, 6.1E (respiratory tract irritant)

#### Label elements



Signal word

ord Danger

# Hazard statement(s)

H222+H229	Extremely flammable aerosol. Pressurized container: may burst if heated.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

# Supplementary statement(s)

Not Applicable

# Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P264	Wash all exposed external body areas thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

# Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/ attention.	
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.	
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell.	
P302+P352	IF ON SKIN: Wash with plenty of water.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	

P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

# Precautionary statement(s) Storage

P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

# 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
1330-20-7	<60	xylene
7782-42-5	<30	<u>graphite</u>
67-64-1	<30	acetone
100-41-4	<5	ethylbenzene
115-10-6	<40	dimethyl ether
Legend: 1. Classified by Chernwatch; 2. Classification drawn from CCID EPA NZ; 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	<ul> <li>If aerosols come in contact with the eyes:</li> <li>Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.</li> <li>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.</li> <li>Transport to hospital or doctor without delay.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	<ul> <li>If solids or aerosol mists are deposited upon the skin:</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Remove any adhering solids with industrial skin cleansing cream.</li> <li>DO NOT use solvents.</li> <li>Seek medical attention in the event of irritation.</li> </ul>
<ul> <li>Inhalation</li> <li>If aerosols, fumes or combustion products are inhaled:         <ul> <li>Remove to fresh air.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating procedures.</li> <li>If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor.</li> </ul> </li> </ul>	
Ingestion	<ul> <li>Avoid giving milk or oils.</li> <li>Avoid giving alcohol.</li> <li>Not considered a normal route of entry.</li> </ul>

# Indication of any immediate medical attention and special treatment needed

Treat s	symptomatical	ly.
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for lower alkyl ethers:

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# BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- A low-stimulus environment must be maintained.
- Monitor and treat, where necessary, for shock.
- Anticipate and treat, where necessary, for seizures.
- DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

#### ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Hypotension without signs of hypovolaemia may require vasopressors.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

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#### EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- Ethers may produce anion gap acidosis. Hyperventilation and bicarbonate therapy might be indicated.
- Haemodialysis might be considered in patients with impaired renal function.
- Consult a toxicologist as necessary.

BRONSTEIN, A.C. and CURRANCE, P.L.

#### EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

For acute or short term repeated exposures to xylene:

- Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- Pulmonary absorption is rapid with about 60-65% retained at rest.
- Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 < 50 mm Hg or pCO2 > 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled
- cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice. BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time
Methylhippu-ric acids in urine	1.5 gm/gm creatinine	End of shift
	2 mg/min	Last 4 hrs of shift

Comments

#### SECTION 5 Firefighting measures

#### Extinguishing media

SMALL FIRE:

Water spray, dry chemical or CO2

LARGE FIRE:

Water spray or fog.

#### 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

#### Advice for firefighters

Fire Fighting

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.

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	Prevent, by any means available, spillage from entering drains or water course.
	If safe, switch off electrical equipment until vapour fire hazard removed.
	Use water delivered as a fine spray to control fire and cool adjacent area.
	DO NOT approach containers suspected to be hot.
	Cool fire exposed containers with water spray from a protected location.
	If safe to do so, remove containers from path of fire.
	<ul> <li>Equipment should be thoroughly decontaminated after use.</li> </ul>
	Liquid and vapour are highly flammable.
	<ul> <li>Severe fire hazard when exposed to heat or flame.</li> </ul>
	Vapour forms an explosive mixture with air.
	Severe explosion hazard, in the form of vapour, when exposed to flame or spark.
	<ul> <li>Vapour may travel a considerable distance to source of ignition.</li> </ul>
	Heating may cause expansion or decomposition with violent container rupture.
	<ul> <li>Aerosol cans may explode on exposure to naked flames.</li> </ul>
Fire/Explosion Hazard	<ul> <li>Rupturing containers may rocket and scatter burning materials.</li> </ul>
	<ul> <li>Hazards may not be restricted to pressure effects.</li> </ul>
	May emit acrid, poisonous or corrosive fumes.
	<ul> <li>On combustion, may emit toxic fumes of carbon monoxide (CO).</li> </ul>
	Combustion products include:
	carbon dioxide (CO2)
	other pyrolysis products typical of burning organic material.
	Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

# **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> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Wear protective clothing, impervious gloves and safety glasses.</li> <li>Shut off all possible sources of ignition and increase ventilation.</li> <li>Wipe up.</li> <li>If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated.</li> <li>Undamaged cans should be gathered and stowed safely.</li> </ul>
Major Spills	<ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water courses</li> <li>No smoking, naked lights or ignition sources.</li> <li>Increase ventilation.</li> <li>Stop leak if safe to do so.</li> <li>Water spray or fog may be used to disperse / absorb vapour.</li> <li>Absorb or cover spill with sand, earth, inert materials or vermiculite.</li> <li>If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated.</li> <li>Undamaged cans should be gathered and stowed safely.</li> <li>Collect residues and seal in labelled drums for disposal.</li> </ul>

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.	
	DO NOT enter confined spaces until atmosphere has been checked.	
	Avoid smoking, naked lights or ignition sources.	
	Avoid contact with incompatible materials.	
	When handling, DO NOT eat, drink or smoke.	
	DO NOT incinerate or puncture aerosol cans.	
		Continued

	<ul> <li>DO NOT spray directly on humans, exposed food or food utensils.</li> <li>Avoid physical damage to containers.</li> <li>Always wash hands with soap and water after handling.</li> <li>Work clothes should be laundered separately.</li> <li>Use good occupational work practice.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.</li> </ul>
Other information	<ul> <li>Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can</li> <li>Store in original containers in approved flammable liquid storage area.</li> <li>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</li> <li>No smoking, naked lights, heat or ignition sources.</li> <li>Keep containers securely sealed. Contents under pressure.</li> <li>Store in a cool, dry, well ventilated area.</li> <li>Avoid storage at temperatures higher than 40 deg C.</li> <li>Store in an upright position.</li> <li>Protect containers against physical damage.</li> <li>Check regularly for spills and leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>

# Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Aerosol dispenser.</li> <li>Check that containers are clearly labelled.</li> </ul>
Storage incompatibility	<ul> <li>Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of reaction produced by the gas in chemical reaction with other substances</li> <li>Avoid reaction with oxidising agents</li> </ul>

**X** — Must not be stored together

**0** — May be stored together with specific preventions

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+ — May be stored together

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Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

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# **SECTION 8 Exposure controls / personal protection**

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#### **Control parameters**

#### Occupational Exposure Limits (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	xylene	Xylene (o-, m-, p- isomers)	80 ppm / 350 mg/m3	655 mg/m3 / 150 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	xylene	Dimethylbenzene	50 ppm / 217 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	graphite	Graphite (all forms except fibres) (respirable dust) (natural & synthetic)	3 mg/m3	Not Available	Not Available	(e) Containing no asbestos and < 1% crystalline silica.
New Zealand Workplace Exposure Standards (WES)	graphite	Graphite, all forms except graphite fibres respirable dust	3 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	acetone	Acetone	500 ppm / 1185 mg/m3	2375 mg/m3 / 1000 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	acetone	Acetone	500 ppm / 1185 mg/m3	2375 mg/m3 / 1000 ppm	Not Available	(bio) - Exposure can also be estimated by biological monitoring

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# DEOX R31 Solid Film Lubricant (Aerosol)

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	ethylbenzene	Ethyl benzene	100 ppm / 434 mg/m3	543 mg/m3 / 125 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	ethylbenzene	Ethyl benzene	20 ppm / 88 mg/m3	176 mg/m3 / 40 ppm	Not Available	(skin) - Skin absorption oto - Ototoxin
Australia Exposure Standards	dimethyl ether	Dimethyl ether	400 ppm / 760 mg/m3	950 mg/m3 / 500 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	dimethyl ether	Dimethylether	400 ppm / 766 mg/m3	958 mg/m3 / 500 ppm	Not Available	Not Available

# Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
xylene	Not Available	Not Available		Not Available
graphite	6 mg/m3	330 mg/m3		2,000 mg/m3
acetone	Not Available	Not Available		Not Available
ethylbenzene	Not Available	Not Available		Not Available
dimethyl ether	3,000 ppm	3800* ppm		7200* ppm
Ingredient	Original IDLH		Revised IDLH	
xylene	900 ppm		Not Available	
graphite	1,250 mg/m3		Not Available	
acetone	2,500 ppm		Not Available	

Not Available

Not Available

# Exposure controls

800 ppm

Not Available

ethylbenzene

dimethyl ether

Appropriate engineering	Engineering controls are used to remove a hazard or place a		Ũ	
controls	engineering controls can be highly effective in protecting wo	rkers 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 enviro	onment. Ventilation can remove or dilute a	an air contaminant if	
	designed properly. The design of a ventilation system must r		al or contaminant in use.	
	Employers may need to use multiple types of controls to pre	vent employee overexposure.		
	General exhaust is adequate under normal conditions. If risk	of overexposure exists, wear SAA appro	oved respirator. Correct fi	
	essential to obtain adequate protection.			
	Provide adequate ventilation in warehouse or closed storage areas.			
	Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.			
	velocities of fresh circulating air required to effectively remo	ve the contaminant.		
	Type of Contaminant:		Speed:	
	aerosols, (released at low velocity into zone of active gene	eration)	0.5-1 m/s	
	direct spray, spray painting in shallow booths, gas discharg air motion)	ge (active generation into zone of rapid	1-2.5 m/s (200-500 f/min.)	
	Within each range the appropriate value depends on:			
	Lower end of the range	Upper end of the range		
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents		
	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity		
	3: Intermittent, low production.	3: High production, heavy use		
	4: Large hood or large air mass in motion	4: Small hood-local control only		
	Simple theory shows that air velocity falls rapidly with distant	ce away from the opening of a simple ext	raction pipe. Velocity	
	generally decreases with the square of distance from the ext	traction point (in simple cases). Therefore	the air speed at the	
	extraction point should be adjusted, accordingly, after reference	nce to distance from the contaminating so	ource. The air velocity at	

meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction

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apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are

#### DEOX R31 Solid Film Lubricant (Aerosol)

installed or used. Individual protection measures, such as personal protective equipment No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: For potentially moderate or heavy exposures: Eye and face protection Safety glasses with side shields. • NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them. Skin protection See Hand protection below No special equipment needed when handling small quantities. OTHERWISE: For potentially moderate exposures: Hands/feet protection • Wear general protective gloves, eg. light weight rubber gloves. For potentially heavy exposures: • Wear chemical protective gloves, eg. PVC. and safety footwear. See Other protection below **Body protection** No special equipment needed when handling small quantities. OTHERWISE: Overalls. Other protection Skin cleansing cream. Evewash unit. Do not spray on hot surfaces.

## Recommended material(s)

#### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: "Forsberg Clothing Performance Index".

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

DEOX R31 Solid Film Lubricant (Aerosol)

BUTYL/NEOPRENE C CVPE C HYPALON C NAT+NEOPR+NITRILE C NATURAL RUBBER C NATURAL RUBBER C NATURAL +NEOPRENE C NEOPRENE C NEOPRENE/NATURAL C NICON C PVC C PVC C PVC C PVC C SARANEX-23 2-PLY C VITON C C VITON C C C C C C C C C C C C C C	Material	CPI
CPECHYPALONCNAT+NEOPR+NITRILECNATURAL RUBBERCNATURAL+NEOPRENECNEOPRENECNEOPRENE/NATURALCNITRILECNITRILE+PVCCPE/EVAL/PECPVACPVCCPVDC/PE/PVDCCSARANEX-23CSARANEX-23 2-PLYCVITONC	BUTYL	С
HYPALONCHYPALONCNAT+NEOPR+NITRILECNATURAL RUBBERCNATURAL+NEOPRENECNEOPRENECNEOPRENE/NATURALCNITRILECNITRILE+PVCCPVACPVCCPVC/PE/PVDCCSARANEX-23CSARANEX-23CVITONC	BUTYL/NEOPRENE	С
NAT+NEOPR+NITRILECNATURAL RUBBERCNATURAL+NEOPRENECNEOPRENECNEOPRENE/NATURALCNITRILECNITRILE+PVCCPVACPVCCPVDC/PE/PVDCCSARANEX-23CSARANEX-23 2-PLYCVITONC	CPE	С
NATURAL RUBBERCNATURAL RUBBERCNATURAL+NEOPRENECNEOPRENE/NATURALCNITRILECNITRILE+PVCCPE/EVAL/PECPVACPVCCPVDC/PE/PVDCCSARANEX-23CSARANEX-23 2-PLYCTEFLONC	HYPALON	С
NATURAL+NEOPRENECNEOPRENECNEOPRENE/NATURALCNITRILECNITRILE+PVCCPZ/EVAL/PECPVACPVCCPVDC/PE/PVDCCSARANEX-23CSARANEX-23 2-PLYCVITONC	NAT+NEOPR+NITRILE	С
NEOPRENE C NEOPRENE/NATURAL C NITRILE C NITRILE C PE/EVAL/PE C PVA C PVC C PVC C PVC C SARANEX-23 SARANEX-23 C TEFLON C VITON C	NATURAL RUBBER	С
NEOPRENE/NATURAL C NITRILE C NITRILE C P/EVAL/PE C PVA C PVC C PVC C PVDC/PE/PVDC C SARANEX-23 C SARANEX-23 2-PLY C TEFLON C VITON C	NATURAL+NEOPRENE	С
NITRILE C NITRILE+PVC C PE/EVAL/PE C PVA C PVC C PVC C SARANEX-23 C SARANEX-23 2-PLY C TEFLON C VITON C	NEOPRENE	С
NITRILE+PVC C PE/EVAL/PE C PVA C PVC C PVDC/PE/PVDC C SARANEX-23 C SARANEX-23 2-PLY C TEFLON C VITON C	NEOPRENE/NATURAL	С
PE/EVAL/PE C PVA C PVC C PVC/PE/PVDC C SARANEX-23 C SARANEX-23 2-PLY C TEFLON C VITON C	NITRILE	С
PVACPVCCPVDC/PE/PVDCCSARANEX-23CSARANEX-23 2-PLYCTEFLONCVITONC	NITRILE+PVC	С
PVC C C C C SARANEX-23 2-PLY C C C C C C C C C C C C C C C C C C C	PE/EVAL/PE	С
PVDC/PE/PVDC C SARANEX-23 C SARANEX-23 2-PLY C TEFLON C VITON C	PVA	С
SARANEX-23 C SARANEX-23 2-PLY C TEFLON C VITON C	PVC	С
SARANEX-23 2-PLY C TEFLON C VITON C	PVDC/PE/PVDC	С
TEFLON C VITON C	SARANEX-23	С
VITON C	SARANEX-23 2-PLY	С
	TEFLON	С
VITON/NEOPRENE C	VITON	С
	VITON/NEOPRENE	С

\* 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

#### **Respiratory protection**

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

#### ^ - 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)

Aerosols, in common with most vapours/ mists, should never be used in confined spaces without adequate ventilation. Aerosols, containing agents designed to enhance or mask smell, have triggered allergic reactions in predisposed individuals.

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#### DEOX R31 Solid Film Lubricant (Aerosol)

**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.

## Ansell Glove Selection

Glove — In order of recommendation
AlphaTec® 15-554
AlphaTec® 38-612
BioClean™ Ultimate BUPS
AlphaTec® 53-001
AlphaTec® 58-005
BioClean™ Emerald BENS
BioClean™ Extra BLAS
BioClean™ Fusion (Sterile) S-BFAP
BioClean™ N-Plus BNPS
MICROFLEX® MidKnight® XTRA 93-862

# **SECTION 9** Physical and chemical properties

## Information on basic physical and chemical properties

Appearance	Liquid aerosol with a characteristic odour; partially miscible with water.		
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)	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)	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 Applicable	Gas group	Not Available
Solubility in water	Partly miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

# **SECTION 10 Stability and reactivity**

Chemical stability	<ul> <li>Elevated temperatures.</li> <li>Presence of open flame.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
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 Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. There is strong evidence to suggest that this material can cause, if inhaled once, very serious, irreversible damage of organs. The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation hazard is increased at higher temperatures. Inhaled Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal. Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. WARNING: Intentional misuse by concentrating/inhaling contents may be lethal. Not normally a hazard due to physical form of product. Not a likely route of entry into the body in commercial or industrial environments. The liquid may produce considerable gastrointestinal discomfort and be harmful or toxic if swallowed. Ingestion Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. There is strong evidence to suggest that this material can cause, if swallowed once, very serious, irreversible damage of organs. There is strong evidence to suggest that this material, on a single contact with skin, can cause very serious, irreversible damage of organs. The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Skin Contact Sprav mist may produce discomfort 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. Skin contact with the material may be harmful; systemic effects may result following absorption. There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. Eve Not considered to be a risk because of the extreme volatility of the gas. The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Ample evidence exists from experimentation that reduced human fertility is directly caused by exposure to the material. Ample evidence exists, from results in experimentation, that developmental disorders are directly caused by human exposure to the material. Prolonged or repeated inhalation of dust may cause in lung disease. Graphite workers have reported symptoms of headaches, Chronic coughing, depression, low appetite, difficult breathing and black sputum. Workers suffering from this have generally worked in the industry for long periods, (10 years or more), although some cases have been reported after as little as four years. There is insufficient evidence to suggest that exposure to carbon black causes increased susceptibility to cancer or other ill effects. Some lung changes can occur after a prolonged period of exposure as well as increased strain on the right side of the heart. Main route of exposure to the gas in the workplace is by inhalation. Chronic exposure to alkyl ethers may result in loss of appetite, excessive thirst, fatigue, and weight loss. Women exposed to xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects. Evaluation of workers chronically exposed to xylene has demonstrated lack of genetic toxicity. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS] TOXICITY IRRITATION DEOX R31 Solid Film Lubricant (Aerosol) Not Available Not Available

xylene	ΤΟΧΙΟΙΤΥ	IRRITATION
	Dermal (rabbit) LD50: >1700 mg/kg <sup>[2]</sup>	Eye (human): 200 ppm irritant
	Inhalation(Rat) LC50: 5000 ppm4h <sup>[2]</sup>	Eye (rabbit): 5 mg/24h SEVERE
	Oral (Mouse) LD50; 2119 mg/kg <sup>[2]</sup>	Eye (rabbit): 87 mg mild
		Eye: adverse effect observed (irritating) <sup>[1]</sup>
		Skin (rabbit):500 mg/24h moderate
		Skin: adverse effect observed (irritating) <sup>[1]</sup>
	тохісіту	IRRITATION
graphite	Inhalation(Rat) LC50: >2 mg/L4h <sup>[1]</sup>	Not Available
	Oral (Rat) LD50: >200 mg/kg <sup>[1]</sup>	
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 20000 mg/kg <sup>[2]</sup>	Eye (human): 500 ppm - irritant
	Inhalation(Mouse) LC50; 44 mg/L4h <sup>[2]</sup>	Eye (rabbit): 20mg/24hr -moderate
acetone	Oral (Rat) LD50: 5800 mg/kg <sup>[2]</sup>	Eye (rabbit): 3.95 mg - SEVERE
acetone		Eye: adverse effect observed (irritating) <sup>[1]</sup>
		Skin (rabbit): 500 mg/24hr - mild
		Skin (rabbit):395mg (open) - mild
		Skin: no adverse effect observed (not irritating) $\left[ 1 \right]$
	тохісіту	IRRITATION
	Dermal (rabbit) LD50: 17800 mg/kg <sup>[2]</sup>	Eye (rabbit): 500 mg - SEVERE
ethylbenzene	Inhalation(Rat) LC50: 17.2 mg/l4h <sup>[2]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>
	Oral (Rat) LD50: 3500 mg/kg <sup>[2]</sup>	Skin (rabbit): 15 mg/24h mild
		Skin: no adverse effect observed (not irritating) $^{[1]}$
	TOXICITY	IRRITATION
dimethyl ether	Inhalation(Rat) LC50: >20000 ppm4h <sup>[1]</sup>	Not Available
Legend:	1. Value obtained from Europe ECHA Registered Sul	ostances - Acute toxicity 2. Value obtained from manufacturer's SDS.

XYLENE	Reproductive effector in rats The substance is classified by IARC as Group 3: <b>NOT</b> classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing.
GRAPHITE	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. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production. No significant acute toxicological data identified in literature search.
ACETONE	For acetone: The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it removes fat from the skin, and it also irritates the eye. Animal testing shows acetone may cause anaemia. Studies in humans have shown that exposure to acetone at a level of 2375 mg/m3 does not negatively impact an individual's emotional regulation, behaviour, or learning ability.
ETHYLBENZENE	Liver changes, utheral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded. Ethylbenzene is readily absorbed when inhaled, swallowed or in contact with the skin. It is distributed throughout the body, and passed out through urine. It may irritate the skin, eyes and may cause hearing loss if exposed to high doses. Long Term

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	exposure may cause damage to the kidney, liver testing. There is no research on its effect on sex on <b>NOTE:</b> Substance has been shown to be mutage or change to cellular DNA.	organs and unborn babies. enic in at least one assay, or belo	ongs to a family of chemicals producing dam
XYLENE & ETHYLBENZENE	WARNING: This substance has been classified b The material may produce severe irritation to the irritants may produce conjunctivitis.	,	, ,
XYLENE & ACETONE & ETHYLBENZENE	The material may cause skin irritation after prolor the production of vesicles, scaling and thickening	• • •	may produce on contact skin redness, swelli
Acute Toxicity	<b>v</b>	Carcinogenicity	*
Acute Toxicity Skin Irritation/Corrosion	✓ ✓	Carcinogenicity Reproductivity	¥ ¥
-		<b>•</b> •	•
Skin Irritation/Corrosion Serious Eye	✓ ✓	Reproductivity	×

# **SECTION 12 Ecological information**

DEOX R31 Solid Film	Endpoint	Test Duration (hr)	Species	Value	Source
Lubricant (Aerosol)	Not Available	Not Available	Not Available	Not Available	Not Availabl
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	EC50	72h	Algae or other aquatic plants	4.6mg/l	2
xylene	EC50	48h	Crustacea	1.8mg/l	2
	LC50	96h	Fish	2.6mg/l	2
	NOEC(ECx)	73h	Algae or other aquatic plants	0.44mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	EC50	72h	Algae or other aquatic plants	>100mg/l	2
graphite	EC50	48h	Crustacea	>100mg/l	2
	NOEC(ECx)	48h	Crustacea	>=100mg/l	2
	LC50	96h	Fish	>100mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Sourc
	LC50	96h	Fish	3744.6- 5000.7mg/L	4
	NOEC(ECx)	12h	Fish	0.001mg/L	4
acetone	EC50	72h	Algae or other aquatic plants	5600- 10000mg/l	4
	EC50	48h	Crustacea	6098.4mg/L	5
	EC50	96h	Algae or other aquatic plants	9.873- 27.684mg/l	4
ethylbenzene	Endpoint	Test Duration (hr)	Species	Value	Sourc
	EC50	96h	Algae or other aquatic plants	1.7- 7.6mg/l	4
	EC50	72h	Algae or other aquatic plants	2.4- 9.8mg/l	4
	EC50	48h	Crustacea	1.37- 4.4mg/l	4
	LC50	96h	Fish	3.381-	4

Continued...

				4.075mg/L	
	EC50(ECx)	24h	Algae or other aquatic plants	0.02- 938mg/l	4
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	48h	Crustacea	>4400mg/L	2
dimethyl ether	EC50	96h	Algae or other aquatic plants	154.917mg/l	2
	LC50	96h	Fish	1783.04mg/l	2
	NOEC(ECx)	48h	Crustacea	>4000mg/l	1
Legend:	4. US EPA, Eco	• •	e ECHA Registered Substances - Ecotoxicolog Data 5. ECETOC Aquatic Hazard Assessment I		

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

DO NOT discharge into sewer or waterways.

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)
ethylbenzene	HIGH (Half-life = 228 days)	LOW (Half-life = 3.57 days)
dimethyl ether	LOW	LOW

#### **Bioaccumulative potential**

Ingredient	Bioaccumulation
xylene	MEDIUM (BCF = 740)
acetone	LOW (BCF = 0.69)
ethylbenzene	LOW (BCF = 79.43)
dimethyl ether	LOW (LogKOW = 0.1)

# Mobility in soil

Ingredient	Mobility
acetone	HIGH (KOC = 1.981)
ethylbenzene	LOW (KOC = 517.8)
dimethyl ether	HIGH (KOC = 1.292)

# **SECTION 13 Disposal considerations**

aste treatment methods Product / Packaging disposal
---

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

#### **Disposal Requirements**

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages

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#### DEOX R31 Solid Film Lubricant (Aerosol)

which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

DO NOT deposit the hazardous substance into or onto a landfill or a sewage facility.

Burning the hazardous substance must happen under controlled conditions with no person or place exposed to

(1) a blast overpressure of more than 9 kPa; or

(2) an unsafe level of heat radiation.

The disposed hazardous substance must not come into contact with class 1 or 5 substances.

# **SECTION 14 Transport information**

#### Labels Required

	2
Marine Pollutant	NO
HAZCHEM	Not Applicable

## Land transport (ADG)

14.1. UN number or ID number	1950	
14.2. UN proper shipping name	AEROSOLS	
14.3. Transport hazard class(es)	Class Subsidiary Hazard	2.1 Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions Limited quantity	63 190 277 327 344 381 1000ml

# Land transport (UN)

14.1. UN number or ID number	1950	
14.2. UN proper shipping name	AEROSOLS	
14.3. Transport hazard class(es)	Class Subsidiary Hazard	2.1 Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions Limited quantity	63; 190; 277; 327; 344; 381 1000ml

#### Air transport (ICAO-IATA / DGR)

14.1. UN number	1950	
14.2. UN proper shipping name	Aerosols, flammable	
	ICAO/IATA Class	2.1
14.3. Transport hazard class(es)	ICAO / IATA Subsidiary Hazard	Not Applicable
()	ERG Code	10L

14.4. Packing group	Not Applicable		
14.5. Environmental hazard	Not Applicable		
	Special provisions	A145 A167 A802	
	Cargo Only Packing Instructions	203	
	Cargo Only Maximum Qty / Pack	150 kg	
14.6. Special precautions for user	Passenger and Cargo Packing Instructions	203	
	Passenger and Cargo Maximum Qty / Pack	75 kg	
	Passenger and Cargo Limited Quantity Packing Instructions	Y203	
	Passenger and Cargo Limited Maximum Qty / Pack	30 kg G	

# Sea transport (IMDG-Code / GGVSee)

14.1. UN number	1950			
14.2. UN proper shipping name	AEROSOLS	AEROSOLS		
14.3. Transport hazard	IMDG Class	IMDG Class 2.1		
class(es)	IMDG Subsidiary Hazard Not Applicable		Not Applicable	
14.4. Packing group	Not Applicable			
14.5 Environmental hazard	Not Applicable			
	EMS Number	F-D, 3	S-U	
14.6. Special precautions for user	Special provisions	63 190 277 327 344 381 959		
	Limited Quantities	1000	ml	

# 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

Product name	Group
xylene	Not Available
graphite	Not Available
acetone	Not Available
ethylbenzene	Not Available
dimethyl ether	Not Available

#### 14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
xylene	Not Available
graphite	Not Available
acetone	Not Available
ethylbenzene	Not Available
dimethyl ether	Not Available

# **SECTION 15 Regulatory information**

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

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard	
HSR002517	Aerosols Flammable Carcinogenic Group Standard 2020	
HSR Wamber	GPOND Standard 2020	

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

xylene is found on the following regulatory lists	
Australia Hazardous Chemical Information System (HCIS) - Hazardous	New Zealand Approved Hazardous Substances with controls
Chemicals	New Zealand Hazardous Substances and New Organisms (HSNO) Act -
Australia Standard for the Uniform Scheduling of Medicines and Poisons	Classification of Chemicals
(SUSMP) - Schedule 5	New Zealand Hazardous Substances and New Organisms (HSNO) Act -
Australia Standard for the Uniform Scheduling of Medicines and Poisons	Classification of Chemicals - Classification Data
(SUSMP) - Schedule 6	New Zealand Inventory of Chemicals (NZIoC)
Australian Inventory of Industrial Chemicals (AIIC)	New Zealand Workplace Exposure Standards (WES)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic	
graphite is found on the following regulatory lists	
Australian Inventory of Industrial Chemicals (AIIC)	New Zealand Inventory of Chemicals (NZIoC)
International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)	New Zealand Workplace Exposure Standards (WES)
acetone is found on the following regulatory lists	
Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals	New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons	New Zealand Hazardous Substances and New Organisms (HSNO) Act -
(SUSMP) - Schedule 5	Classification of Chemicals - Classification Data
Australian Inventory of Industrial Chemicals (AIIC)	New Zealand Inventory of Chemicals (NZIoC)
New Zealand Approved Hazardous Substances with controls	New Zealand Workplace Exposure Standards (WES)
ethylbenzene is found on the following regulatory lists	
Australia Hazardous Chemical Information System (HCIS) - Hazardous	New Zealand Approved Hazardous Substances with controls
Chemicals	New Zealand Hazardous Substances and New Organisms (HSNO) Act -
Australia Standard for the Uniform Scheduling of Medicines and Poisons	Classification of Chemicals
(SUSMP) - Schedule 5	New Zealand Hazardous Substances and New Organisms (HSNO) Act -
Australian Inventory of Industrial Chemicals (AIIC)	Classification of Chemicals - Classification Data
Chemical Footprint Project - Chemicals of High Concern List	New Zealand Inventory of Chemicals (NZIoC)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	New Zealand Workplace Exposure Standards (WES)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans	
dimethyl ether is found on the following regulatory lists	
	Now Zoolond Hozardous Substances and New Organisms (HONO) Ast
Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals	New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
Australia Standard for the Uniform Scheduling of Medicines and Poisons	New Zealand Hazardous Substances and New Organisms (HSNO) Act -
(SUSMP) - Schedule 5	Classification of Chemicals - Classification Data
Australian Inventory of Industrial Chemicals (AIIC)	New Zealand Inventory of Chemicals (NZIoC)
New Zealand Approved Hazardous Substances with controls	New Zealand Workplace Exposure Standards (WES)

## **Hazardous Substance Location**

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Quantity (Closed Containers)	Quantity (Open Containers)
2.1.2A	3 000 L (aggregate water capacity)	3 000 L (aggregate water capacity)

#### **Certified Handler**

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

#### Maximum quantities of certain hazardous substances permitted on passenger service vehicles

Subject to Regulation 13.14 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

Hazard Class	Gas (aggregate water capacity in	Liquid	Solid	Maximum quantity per package for each
	mL)	(L)	(kg)	classification

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#### DEOX R31 Solid Film Lubricant (Aerosol)

Hazard Class	Gas (aggregate water capacity in mL)	Liquid (L)	Solid (kg)	Maximum quantity per package for each classification
2.1.2A				1L (aggregate water capacity)

# **Tracking Requirements**

Not Applicable

# **National Inventory Status**

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (xylene; graphite; acetone; ethylbenzene; dimethyl ether)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (graphite)
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	05/10/2023
Initial Date	05/10/2023

# 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.