Motor Active

Chemwatch: 4940-16 Version No: 9.1.1.1 Safety Data Sheet according to WHS and ADG requirements

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

Product Identifier

Product name	Meguiar's G122 - Gold Class Dash And Trim Foam Protectant
Synonyms	G122 - Gold Class Dash And Trim Foam Protectant (Aerosol); Product Code: G122; Ref No: AP-1187-13
Proper shipping name	AEROSOLS
Other means of identification	Not Available
Relevant identified uses of the substance or mixture and uses advised against	

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

Application is by spray atomisation from a hand held aerosol pack Protective coating

Details of the supplier of the safety data sheet

Registered company name	Motor Active
Address	35 Slough Business Park, Holker Street Silverwater NSW 2128 Australia
Telephone	+61 2 9737 9422 1800 350 622
Fax	+61 2 9737 9414
Website	www.motoractive.com.au
Email	andrew.spira@motoractive.com.au

Emergency telephone number

Association / Organisation	MotorActive	
Emergency telephone numbers	+61 2 9737 9422 (For General Information Monday to Friday 8:30am to 5:pm)	
Other emergency telephone numbers	13 11 26 (In Case of Emergency contact: Poison Information Hotline)	

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

CHEMWATCH HAZARD RATINGS

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

Poisons Schedule	Not Applicable
Classification ^[1]	Gas under Pressure (Compressed gas), Skin Sensitizer Category 1, Carcinogenicity Category 2
Legend:	1. Classified by Chemwatch; 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)		
H280	Contains gas under pressure; may explode if heated.	
H317	May cause an allergic skin reaction.	
H351	Suspected of causing cancer.	
AUH044	Risk of explosion if heated under confinement.	

Chemwatch Hazard Alert Code: 3

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L.GHS.AUS.EN

Supplementary statement(s)

Not Applicable

CLP classification (additional)

Not Applicable

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P261	Avoid breathing mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

Precautionary statement(s) Storage

I-ventilated place.
ŀ

Precautionary statement(s) Disposal

P501

Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
63148-62-9	20-30	polydimethylsiloxane
Not Available	1-5	conditioners
102-71-6	0.25-3	triethanolamine
7732-18-5	65-85	water
74-98-6	1-5	propane
106-97-8.	1-5	butane

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If aerosols come in contact with the eyes: Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes 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. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If solids or aerosol mists are deposited upon the skin: Flush skin and hair with running water (and soap if available). Remove any adhering solids with industrial skin cleansing cream. DO NOT use solvents. Seek medical attention in the event of irritation.
Inhalation	 If aerosols, fumes or combustion products are inhaled: Remove to fresh air. 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. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	Not considered a normal route of entry.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

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. 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. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	 Non combustible. Not considered to be a significant fire risk. Heating may cause expansion or decomposition leading to violent rupture of containers. Aerosol cans may explode on exposure to naked flames. Rupturing containers may rocket and scatter burning materials. Hazards may not be restricted to pressure effects. May emit acrid, poisonous or corrosive fumes. Decomposition may produce toxic fumes of: carbon monoxide (CO) carbon dioxide (CO2) silicon dioxide (SiO2) other pyrolysis products typical of burning organic material.
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 breathing vapours and contact with skin and eyes. Wear protective clothing, impervious gloves and safety glasses. Shut off all possible sources of ignition and increase ventilation. Wipe up. If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely.
Major Spills	 Clear area of personnel and move upwind. Alter 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 course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent). Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services. Silicone fluids, even in small quantities, may present a slip hazard. It may be necessary to rope off area and place warning signs around perimeter. Clean up area from spill, with suitable absorbant, as soon as practically possible. Final cleaning may require use of steam, solvents or detergents. Remove leaking cylinders to a safe place if possible. Release pressure under safe, controlled conditions by opening the valve. DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve. Clear area of personnel and move upwind. Alter Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses No smoking, naked lights or ignition sources. No smoking, naked lights or ignition sources. Vitar spray or fog may be used to disperse / absorb vapour. Also for cover spill with sand, earth, inert materials or vermiculite. If safe, damaged cans should b

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

SECTION 7 HANDLING AND STORAGE

 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.
 but Not enter continued spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid contact with incompatible materials. When handling, DD NOT eat, drink or smoke. DO NOT incinerate or puncture aerosol cans. DO NOT spray directly on humans, exposed food or food utensils. Avoid physical damage to containers. Always wash hands with scap and water after handling. Work clothes should be laundered separately. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
Other information • Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can

Conditions for safe storage, including any incompatibilities

Suitable container	 Aerosol dispenser. Check that containers are clearly labelled.
Storage incompatibility	Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	triethanolamine	Triethanolamine	5 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	butane	Butane	800 ppm / 1900 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name		TEEL-1	TEEL-2	TEEL-3
polydimethylsiloxane	Dimethyl siloxane; (Dimethylpolysiloxane; Syltherm XLT; Syltherm 800; Silicone	e 360)	65 mg/m3	720 mg/m3	4,300 mg/m3
triethanolamine	Triethanolamine; (Trihydroxytriethylamine)		15 mg/m3	240 mg/m3	1,500 mg/m3
propane	Propane		Not Available	Not Available	Not Available
butane	Butane		Not Available	Not Available	Not Available
Ingredient	Original IDLH Revised IDLH				
polydimethylsiloxane	Not Available Not Available				
triethanolamine	Not Available Not Available				
water	Not Available Not Available				
propane	2,100 ppm Not Available				
butane	Not Available	1,600 ppm			

MATERIAL DATA

For butane:

Odour Threshold Value: 2591 ppm (recognition)

Butane in common with other homologues in the straight chain saturated aliphatic hydrocarbon series is not characterised by its toxicity but by its narcosis-inducing effects at high concentrations. The TLV is based on analogy with pentane by comparing their lower explosive limits in air. It is concluded that this limit will protect workers against the significant risk of drowsiness and other narcotic effects.

Odour Safety Factor(OSF)

OSF=0.22 (n-BUTANE)

for triethanolamine: Exposure at or below the TLV-TWA is thought to minimise the potential for skin and eye irritation, and acute effects (including liver, kidney and nerve damage) and chronic effects (including cancer and allergic contact dermatitis).

Odour Safety Factor (OSF) OSF=0.77 (triethanolamine)

For propane Odour Safety Factor(OSF) OSF=0.16 (PROPANE)

Exposed individuals are **NOT** reasonably expected to be warned, by smell, that the Exposure Standard is being exceeded.

Odour Safety Factor (OSF) is determined to fall into either Class C, D or E.

OSF= Exposure Standard (TWA) ppm/ Odour Threshold Value (OTV) ppm

Classification into classes follows:

Class OSF Description

- Over 90% of exposed individuals are aware by smell that the Exposure Standard (TLV-TWA for example) is being reached, even when distracted by working activities 550 А
- в
- 26-550 As "A" for 50-90% of persons being distracted 1-26 As "A" for less than 50% of persons being distracted С
- 0.18-1 10-50% of persons aware of being tested perceive by smell that the Exposure Standard is being reached <0.18 As "D" for less than 10% of persons aware of being tested D
- Е
- Odour Safety Factor(OSF) OSF=0.16 (hydrocarbon propellant)

Exposure controls

Appropriate engineering controls	In projective 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" a "remover" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is 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 a required to effectively remove the contaminant. Type of Contaminant: Speed: aerosols, (released at low velocity into zone of active generation) 0.5-1 m/s direct spray, spray painting in shallow booths, gas discharge (active generation into zone of rapid air motion) 1-2.5 m/s (200-500 f/min.) Within each range Upper end of the range 1 1. Neorn air currents minimal or favourable to capture		ation that strategically "adds" and n of a ventilation system must ation that strategically "adds" and n of a ventilation system must ect fit is essential to obtain velocities" of fresh circulating air Speed: 0.5-1 m/s 1-2.5 m/s (200-500 f/min.) reurrents gh toxicity avy use ontrol only generally decreases with the tijusted, accordingly, after um of 1-2 m/s (200-400 f/min.) for ducing performance deficits within thin tion systems are installed or
Personal protection			
Eye and face protection	No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE : For potentially moderate or heavy exposures: • 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		
Hands/feet protection	 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. No special equipment needed when handling small quantities. OTHERWISE: For potentially moderate exposures: Wear general protective gloves, eg. PVC. and safety footwear. 		
Body protection	See Other protection below		
Other protection	No special equipment needed when handling small quantities. OTHERWISE: • Overalls. • Skin cleansing cream. • Eyewash 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-

Respiratory protection

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

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

generated selection:

Meguiar's G122 - Gold Class Dash And Trim Foam Protectant

Material	CPI
BUTYL	А
NEOPRENE	А
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
PVA	С
PVC	С
VITON	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

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. 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	KAX-AUS P2	-	KAX-PAPR-AUS / Class 1 P2
up to 50 x ES	-	KAX-AUS / Class 1 P2	-
up to 100 x ES	-	KAX-2 P2	KAX-PAPR-2 P2 ^

^ - Full-face

 $\begin{array}{l} \mbox{A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC) \\ \end{array}$

- 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

 Positive pressure, full face, air-supplied breathing apparatus should be used for work in enclosed spaces if a leak is suspected or the primary containment is to be opened (e.g. for a cylinder change)

 Air-supplied breathing apparatus is required where release of gas from primary containment is either suspected or demonstrated.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White foam with a pleasant odour.		
Physical state	Liquid	Relative density (Water = 1)	0.78
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	-7 (propellant)	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	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)	8 (VOC)
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Not Available	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	Not Available	VOC q/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Elevated temperatures. Presence of open flame. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system. WARNING: Intentional misuse by concentrating/inhaling contents may be lethal. Spray mist may produce discomfort				
	Accidental ingestion of the material may be damaging to the health of the individual.				
	Considered an unlikely route of entry in commercial/industrial environments				
Ingestion	Animal studies with silicone fluids indicate that acute toxicity is very low; large doses are required to produce death. Some silicone fluids have a laxative action and may also produce central nervous system depression. Silicone fluids have been used for their defoaming and flatulence-reducing action in the gastrointestinal effect without any reported ill-effects. Aspiration of silicone fluids or emulsions may produce chemical pneumonitis.				
Skin Contact	Limited evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis. Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Low molecular weight silicone fluids may exhibit solvent action and may produce skin irritation.				
	Limited evidence or practical experience suggests, that the material may cau eve contact may cause inflammation characterised by temporary redness (si	use eye irritation in a substantial number of individuals. Repeated or prolonged imilar to windburn) of the conjunctiva (conjunctivitis): temporary impairment of			
	vision and/or other transient eye damage/ulceration may occur.	rolatility of the rase however concentrated atmospheres may produce irritation			
Eye	after brief exposures.				
	when the eyes of numan subjects where exposed to sincone hunds, there wa within 24 hours. When applied to the eyes of rabbits, silicone fluids produced various cituations of the auto of applied produced used logging dogange	d transitory ciritation which lasted no longer than 48 hours. Injection into the			
	Various surveures or the eye or animals produced corriear scarring, degenerative changes in the retina, toreign body reaction and cataracts. On the basis, primarily, of animal experiments, concern has been expressed by at least one classification body that the material may produce carcinogenic				
	or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.				
Chronic	systems.				
	I nere exists implied evidence that shows that skin contact with the material is capable either of inducing a sensitisation reaction in a significant number of individuals, and/or of producing positive response in experimental animals. Principal route of occupational exposure to the gas is by inhalation.				
Meguiar's G122 - Gold Class					
Dash And Trim Foam	Not Available	Not Available			
Protectant					
	TOXICITY	IRRITATION			
polydimethylsiloxane	Dermal (rabbit) LD50: >2000 mg/kg ^{L2}]	Eye (rabbit): 100 mg/1h - mild			
	Oral (rat) LD50: >17000 mg/kg ^{L2]}				
	TOXICITY	IRRITATION			
	dermal (rat) LD50: >2000 mg/kg ^[2]	Eye (rabbit): 0.1 ml -			
	Oral (rat) LD50: 4190 mg/kg ^[2]	Eye (rabbit): 10 mg - mild			
		Eye (rabbit): 5.62 mg - SEVERE			
triethanolamine		minor conjunctival irritation			
		no irritation *			
		Skin (numan): 15 mg/3a (int)-mila			
		Skin (rabbit): 560 mg/24 hr- mild			
water		IRRITATION			
	Oral (rat) LD50: >90000 mg/kg ¹²¹	Not Available			
	ΤΟΧΙCITY	IRRITATION			
propane	Inhalation (rat) LC50: >49942.95 mg/l/15M ^[2]	Not Available			
	тохісіту	IRRITATION			
butane	Inhalation (rat) LC50: 658 mg/l/4H ^[2]	Not Available			
Legend:	 Value obtained from Europe ECHA Registered Substances - Acute toxicit data extracted from RTECS - Register of Toxic Effect of chemical Substance 	ty 2.* Value obtained from manufacturer's SDS. Unless otherwise specified es			

	For siloxanes:
	Effects which based on the reviewed literature do not seem to be problematic are acute toxicity, irritant effects, sensitization and genotoxicity.
	Some studies indicate that some of the siloxanes may have endocrine disrupting properties, and reproductive effects have caused concern about the
	possible effects of the sloxanes on numans and the environment.
	Only lew subcaries are described in the interactive with regard to realit energies, and its interactive housing to conclusions and conjustions of the toxicity related to short-chained linear and cyclic siloxanes based on the present evaluation. Data are primarily found on the cyclic siloxanes D4
	(octamethyloyolotetrasiloxane)
	and D5 (decamethylcyclopentasiloxane) and the short-linear HMDS (hexamethyldisiloxane).
	These three siloxanes have a relatively low order of acute toxicity by oral, dermal and inhalatory routes and do not require classification for this effect.
	They are not found to be irritating to skin or eyes and are also not found sensitizing by skin contact. Data on respiratory sensitization have not been
	identified.
	subcute and subcition could studies show that the liver is the manufacting organ or D4 which also induces index where the index the index to the contribution of the substance from the issues. Primary tarret ormany tarret ormosure by inhalation is the lung. D5 has an enzyme induction
	profile similar to that of D4. Subacute and subchronic inhalation of HMDS affect in particular the lungs and kidneys in rats.
	None of the investigated siloxanes show any signs of genotoxic effects in vitro or in vivo. Preliminary results indicate that D5 has a potential carcinogenic
	effect.
	D4 is considered to impair fertility in rats by inhalation and is classified as a substance toxic to reproduction in category 3 with the risk phrase R62
	(Possible risk of impaired fertility).
	In the results of a study to screen to destrogen activity indicate that D4 has very weak destrogenic and antidestrogenic activity and is a partial agonist (advances the afford of the activity indicate that D4 has very weak destrogenic and antidestrogenic activity and is a partial agonist
	centratices are entered in early and the internet and an internet and the entered and include and the entered
POLYDIMETHYLSILOXANE	that D4 is 585,000 times less potent than ethinyloestradiol in the rat stain Sprague- Dawley and 3.7 million times less potent than ethinyloestradiol in the
	Fisher-344 rat strain. Because of the lack of effects on other endpoints designated to assess oestrogenicity, the oestrogenicity as mode of action for the D4
	reproductive effects has been questioned. An indirect mode of action causing a delay of the LH (luteinising hormone) surge necessary for optimal timing of
	ovulation has been suggested as the mechanism.
	Based on the reviewed information, the critical effects of the siloxanes are impaired fertility (D4) and potential carcinogenic effects (uterine tumours in famelio). Furthermore, there are a fractional environment of the siloxanes are impaired fertility (D4) and potential carcinogenic effects (uterine tumours in famelio).
	remarks, Furthermore there seem to be some effects on various urgans holowing remarked exposures the liver (14) kidney (HMDS) and lung (05 and HMDS) being the target organs
	A possible cestrogenic effect contributing to the reproductive toxicity of D4 is debated. There seems however to be some indication that this toxicity may be
	caused by another mechanism than oestrogen activity.
	Studies are available for linear siloxanes from an analogue group comprising di- to hexa- siloxanes, as well as key physicochemical properties, The
	results of the acute toxicity studies for this analogue group are in agreement: there is no evidence from any of the available studies that the substances in
	this group have any potential for acute toxicity (in terms of either lethality or adverse clinical effects) by any route up to and exceeding the maximum dose
	levels tested according to current OECD guidelines. It is therefore valid to read-across the lack of acute toxicity between the members of the group where
	unere are used squs The metabolism of silanes and siloxanes is influenced by the chemistry of silicon, and it is fundamentally different from that of carbon compounds. These
	differences are due to the fact that silicon is more electropositive than carbon; Si-Si bonds are less stable than C-C bonds and Si-O bonds form very
	readily, the latter due to their high bond energy. Functional groups such as -OH, -CO2H, and -CH2OH are commonly seen in organic drug metabolites. If
	such functionalities are formed from siloxane metabolism, they will undergo rearrangement with migration of the Si atom from carbon to oxygen.
	Consequently, alpha hydroxysilanes may isomerise to silanols and this provides a mechanism by which very polar metabolites may be formed from highly
	hydrophobic alkylsiloxanes in relatively few metabolic steps
	No toxic response noted during so day subcritonic initialation toxicity studies. The no observable enectieven is 450 mg/ms. Non-imitating and
	non-sensitising in human patch test. [Xerox]*
	non-sensitising in human patch test. [Xerox]*
	non-sensitising in human patch test. [Xerox]* The following information refers to contact allergens as a group and may not be specific to this product. Contact allerging quickly manifest themselves as explant enzyme, more precly as utilizing as Quickly academs. The patherespecies of contact enzyme
	non-sensitising in human patch test. [Xerox]* 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 uticaria involve antibody-mediated
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	Skin contact with amine catalysts poses a number of conc redness and swelling to painful blistering, ulceration, and Skin contact with some amines may result in allergic sens resulting from the absorption of the amines through skin ex- reddening of the skin, hives, and facial swelling. These syn Eye Contact: Amine catalysts are alkaline in nature and their vapours an Direct contact with the liquid amine may cause severe irri result in mechanical irritation, pain, and corneal injury.) Exposed persons may experience excessive tearing, burr The corneal swelling may manifest itself in visual disturbai phenomenon around lights. These symptoms are transien Some individuals may experience this effect even when ex- Ingestion: The oral toxicity of amine catalysts varies from moderately Some arnines can cause severe irritation, ulceration, or b Material aspirated (due to vomiting) can damage the bror Affected persons also may experience pain in the chest of drowsiness, thirst, circulatory collapse, coma, and even de Polyurethane Amine Catalysts: Guidelines for Safe H Alliance for Polyurethanes Industry	a number of concerns. Direct skin contact can cause moderate to severe irritation and injury-i.e., from simple), ulceration, and chemical burns. Repeated or prolonged exposure may also result in severe cumulative dermatitis. ult in allergic sensitisation. Sensitised persons should avoid all contact with amine catalysts. Systemic effects es through skin exposure may include headaches, nausea, faintness, anxiety, decrease in blood pressure, welling. These symptoms may be related to the pharmacological action of the amines, and they are usually transient. If their vapours are irritating to the eyes, even at low concentrations. • cause severe irritation and tissue injury, and the "burning" may lead to blindness. (Contact with solid products may corneal injury.) sive tearing, burning, conjunctivitis, and corneal swelling. in visual disturbances such as blurred or "foggy" vision with a blue tint ("blue haze") and sometimes a halo toms are transient and usually disappear when exposure ceases. fect even when exposed to concentrations below doses that ordinarily cause respiratory irritation. s from moderately to very toxic. n, ulceration, or burns of the mouth, throat, esophagus,and gastrointestinal tract. damage the bronchial tubes and the lungs. vain in the chest or abdomen, nausea, bleeding of the throat and the gastrointestinal tract, diarrhea, dizziness, toma, and even death. lelines for Safe Handling and Disposal; Technical Bulletin June 2000			
	The material may produce severe irritation to the eye caus conjunctivitis. The material may cause skin irritation after prolonged or r often characterised by skin redness (erythema) and swell and intracellular oedema of the epidermis.	sing pronounced inflammation. Repeated epeated exposure and may produce a c ing epidermis. Histologically there may b	l or prolonged exposure to irritants may produce ontact dermatitis (nonallergic). This form of dermatitis is be intercellular oedema of the spongy layer (spongiosis)		
	For triethanolamine (and its salts): Acute toxicity: Triethanolamine is of low toxicity by the oral, dermal and inhalation routes of exposure. Oral LD50 values have been shown to range from approximately 5-10 g/kg. The dermal LD50 is greater than 2 g/kg. The inhalation LC50 is greater than a saturated atmosphere Repeat Dose Toxicity: The studies to determine toxicity of triethanolamine from repeated exposure were conducted for a duration of 91 days or 2 years. In both studies the NOAEL was at least 1000 mg/kg. There was no evidence of gross or histopathological change that could be attributed to treatment. Also, triethanolamine was shown to be non-carcinogenic.				
	Genetic Toxicity: Mutation (bacterial);This endpoint has been satisfied by two studies using 4 strains (TA 98, TA 100, TA 1535 and TA 1537) of Salmonella typhimurium. Triethanolamine was not mutagenic in any of the tester strains. Chromosomal aberration (mammalian, <i>in vitro</i>) – This endpoint was satisfied by a cytogenetic assay using Chinese hamster lung cells. Triethanolamine did not induce chromosome aberrations in this test system. Reproductive Toxicity: No studies have been conducted to specifically evaluate the effect of triethanolamine on reproductive performance. However,				
	based on consideration of the repeat dose toxicity studies of at least 90 days duration, there were no abnormalities noted in the histopathological examination of reproductive organs. This fact, and the lack of effects on foetal development, allow the conclusion that triethanolamine would not be expected to produce adverse effects to reproductive performance and fertility. Developmental Toxicity: This endpoint was satisfied using a developmental toxicity screening study according to the Chernoff-Kavlock method . Based on the results from this test, triethanolamine does not impair development of the fetus.				
	551teapcp The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA. Lachrymation, diarrhoea, convulsions, urinary tract changes, changes in bladder weight, changes in testicular weight, changes in thymus weight, changes in liver weight demantitie after systemic exposure kideou urster, bladder tumours recorded. Equivocal tumouring by PTECS criteria. Demant rebit value				
Meguiar's G122 - Gold Class Dash And Trim Foam Protectant &	quoted above is for occluded patch in male or female anir The material may be irritating to the eye, with prolonged c conjunctivitis.	nals * Union Carbide	or prolonged exposure to irritants may produce		
	No significant acute toxicological data identified in literati	ire search			
Acute Toxicity	X	Carcinogenicity	V		
Skin Irritation/Corrosion	× · · · · · · · · · · · · · · · · · · ·	Reproductivity	×		
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×		
Mutagenicity	×	Aspiration Hazard	×		

Legend: 🗙 – D

Data either not available or does not fill the criteria for classification
 Data available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Meguiar's G122 - Gold Class	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SOURCE
Dash And Trim Foam Protectant	Not Available	Not Available	Not Available	Not Not Available Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SOURCE
polydimethylsiloxane	LC50	96	Fish	3.16mg/L 4
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE SOURCE
triethanolamine	LC50	96	Fish	11-800mg/L 2

	EC50	48	Crustacea	609.88mg/L	2
	EC50	96	Algae or other aquatic plants	169mg/L	1
	EC0	24	Crustacea	1-530mg/L	2
	NOEC	504	Crustacea	16mg/L	1
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
water	LC50	96	Fish	897.520mg/L	3
	EC50	96	Algae or other aquatic plants	8768.874mg/L	3
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
propane	LC50	96	Fish	10.307mg/L	3
	EC50	96	Algae or other aquatic plants	7.71mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
butane	LC50	96	Fish	5.862mg/L	3
	EC50	96	Algae or other aquatic plants	7.71mg/L	2

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

It is well accepted that polydimethylsiloxane fluids become permanent residents of sediment but should not exert adverse environmental effects. Physical effects such as surface entrapment have been observed when testing aquatic invertebrates in clean laboratory water, but similar effects are not expected in natural environments where a large variety of other surfaces provide opportunities for deposition

Silicone fluids are very surface active because the flexible siloxane linkages permit alignment of the hydrophobic methyl substituents towards the non-polar phase, and of the polysiloxane backbone towards the polar phase. The polar medium is generally water, and a polar media to which polydimethylsiloxanes become attached may be textiles, sewage sludge, hair, algae, sediment etc. In aqueous environments, polydimethylsiloxanes are adsorbed onto sedimenting particles. Also, in the presence of nitrate ions, which exist at various concentrations in the environment, short chain siloxanes are photodegraded to the level of silicate within days

Drinking Water Standards: hydrocarbon total: 10 ug/l (UK max.).

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
triethanolamine	LOW	LOW
water	LOW	LOW
propane	LOW	LOW
butane	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
triethanolamine	LOW (BCF = 3.9)
water	LOW (LogKOW = -1.38)
propane	LOW (LogKOW = 2.36)
butane	LOW (LogKOW = 2.89)

Mobility in soil

Ingredient	Mobility
triethanolamine	LOW (KOC = 10)
water	LOW (KOC = 14.3)
propane	LOW (KOC = 23.74)
butane	LOW (KOC = 43.79)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	 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. Where in doubt contact the responsible authority. Consult State Land Waste Management Authority for disposal. Discharge contents of damaged aerosol cans at an approved site. Allow small quantities to evaporate. DO NOT incinerate or puncture aerosol cans. Bury residues and emptied aerosol cans at an approved site.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO Nat Applicable
HAZCHEM	Not Applicable

Land transport (ADG)

UN number	1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	Class 2.2 Subrisk Not Applicable
Packing group	Not Applicable
Environmental hazard	Not Applicable
Special precautions for user	Special provisions63 190 277 327 344 381Limited quantity1000ml

Air transport (ICAO-IATA / DGR)

UN number	1950			
UN proper shipping name	Aerosols, non-flammable	•		
Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk ERG Code	2.2 Not Applicable 2L		
Packing group	Not Applicable			
Environmental hazard	Not Applicable	Not Applicable		
Special precautions for user	Special provisions Cargo Only Packing Ir Cargo Only Maximum Passenger and Cargo Passenger and Cargo Passenger and Cargo Passenger and Cargo	Instructions Qty / Pack Packing Instructions Maximum Qty / Pack Limited Quantity Packing Instructions Limited Maximum Qty / Pack	A98 A145 A167 A802 203 150 kg 203 75 kg Y203 30 kg G	

Sea transport (IMDG-Code / GGVSee)

UN number	1950			
UN proper shipping name	AEROSOLS			
Transport hazard class(es)	IMDG Class IMDG Subrisk	2.2 Not Applicable		
Packing group	Not Applicable			
Environmental hazard	Not Applicable			
Special precautions for user	EMS Number Special provisions Limited Quantities	F-D, S-U 63 190 277 327 344 381 959 1000ml		

Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

SECTION 15 REGULATORY INFORMATION

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

POLYDIMETHYLSILOXANE(63148-62-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule	
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix	4	
B (Part 3)	IMO IBC Code Chapter 17: Summary of minimum requirements	
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Index	IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk	
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 10 / Appendix C	IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances	
TRIETHANOLAMINE(102-71-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS		
Australia Exposure Standards	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule	
Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals	4	
Australia Inventory of Chemical Substances (AICS)	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule	
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix		
E (Part 2)	GESAMP/EHS Composite List - GESAMP Hazard Profiles	
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix	INO IBC Code Chapter 17: Summary of minimum requirements	
F (Part 3)	INO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk	
Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Index	International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	
WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS		
Australia Inventory of Chemical Substances (AICS)	IMO IBC Code Chapter 18: List of products to which the Code does not apply	
PROPANE(74-98-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS		
Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix	
Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes	E (Part 2)	
Australia Dangerous Goods Code (ADG Code) - Packing Instruction - Liquefied and Dissolved Gases	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5	
Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals	International Air Transport Association (IATA) Dangerous Goods Regulations	
Australia Inventory of Chemical Substances (AICS)	International Maritime Dangerous Goods Requirements (IMDG Code)	
	United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)	
BUTANE(106-97-8.) IS FOUND ON THE FOLLOWING REGULATORY LISTS		
Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix	
Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)	
Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes Australia Dangerous Goods Code (ADG Code) - Packing Instruction - Liquefied and Dissolved Gases	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2) Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5	
Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes Australia Dangerous Goods Code (ADG Code) - Packing Instruction - Liquefied and Dissolved Gases Australia Exposure Standards	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2) Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5 International Air Transport Association (IATA) Dangerous Goods Regulations	
Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes Australia Dangerous Goods Code (ADG Code) - Packing Instruction - Liquefied and Dissolved Gases Australia Exposure Standards Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals	Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2) Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5 International Air Transport Association (IATA) Dangerous Goods Regulations International Maritime Dangerous Goods Requirements (IMDG Code)	

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)

National Inventory Status

National Inventory	Status	
Australia - AICS	No (conditioners) Non-disclosed ingredients	
Canada - DSL	No (conditioners) Non-disclosed ingredients	
Canada - NDSL	No (polydimethylsiloxane; butane; triethanolamine; water; propane; conditioners) Non-disclosed ingredients	
China - IECSC	No (conditioners) Non-disclosed ingredients	
Europe - EINEC / ELINCS / NLP	No (polydimethylsiloxane; conditioners) Non-disclosed ingredients	
Japan - ENCS	No (polydimethylsiloxane; conditioners) Non-disclosed ingredients	
Korea - KECI	No (conditioners) Non-disclosed ingredients	
New Zealand - NZIoC	No (conditioners) Non-disclosed ingredients	
Philippines - PICCS	No (conditioners) Non-disclosed ingredients	
USA - TSCA	No (conditioners) Non-disclosed ingredients	
Taiwan - TCSI	No (conditioners) Non-disclosed ingredients	
Mexico - INSQ	No (conditioners) Non-disclosed ingredients	
Vietnam - NCI	No (conditioners) Non-disclosed ingredients	
Russia - ARIPS	No (conditioners) Non-disclosed ingredients	
Thailand - TECI	No (polydimethylsiloxane; conditioners) Non-disclosed ingredients	
Legend:	Yes = All declared ingredients are on the inventory No = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)	

SECTION 16 OTHER INFORMATION

Revision Date	16/04/2019
Initial Date	14/04/2004

SDS Version Summary

Version	Issue Date	Sections Updated
7.1.1.1	26/03/2014	Acute Health (skin), Classification
9.1.1.1	16/04/2019	Physical Properties

Other information

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

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

Definitions and abbreviations

PC — TWA: Permissible Concentration-Time Weighted Average PC — STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit, IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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