Dentsply Lynal Liquid

Dentsply (Australia) Pty Ltd

Chemwatch: **4645-08** Version No: **3.1.1.1**

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: **01/01/2013**Print Date: **21/11/2016**S.GHS.AUS.EN

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

Dental conditioner and temporary reliner.

Product name Dentsply Lynal Liquid Synonyms Lynal Liquid, Part Number: 653006 Proper shipping name FLAMMABLE LIQUID, N.O.S. (contains ethanol) Other means of identification Not Available Relevant identified uses of the substance or mixture and uses advised against

Details of the supplier of the safety data sheet

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Registered company name	Dentsply (Australia) Pty Ltd
Address	11-21 Gilby Road Mount Waverley VIC 3149 Australia
Telephone	1300 55 29 29
Fax	+61 3 9538 8260
Website	www.dentsply.com.au
Email	clientservices@dentsply.com

Emergency telephone number

Relevant identified uses

Association / Organisation	Poisons Information Centre (AUSTRALIA)
Emergency telephone numbers	13 11 26 - AUSTRALIA (24 hour service)
Other emergency telephone numbers	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.

CHEMWATCH HAZARD RATINGS

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

Poisons Schedule	Not Applicable
Classification [1]	Flammable Liquid Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Label elements

GHS label elements



SIGNAL WORD WA	RNING
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Hazard statement(s)

H226 Flammable liquid and vapour.

Precautionary statement(s) Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.

Precautionary statement(s) Response

P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.	
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
85-70-1	>90	butoxycarbonylmethyl butyl phthalate
64-17-5	<10	ethanol

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	 If furnes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Combustion products include: carbon dioxide (CO2) formaldehyde

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

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

Special hazards arising from the substrate or mixture

Fire Incompatibility	► Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result		
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. 		
Fire/Explosion Hazard	Liquid and vapour are flammable. Moderate fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Moderate explosion hazard when exposed to heat or flame.		

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other pyrolysis products typical of burning organic material.

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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	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. May be violently or explosively reactive. Wear breathing apparatus plus protective gloves.

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 overexposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
Other information	Store in original containers in approved flammable liquid storage area. Store away from incompatible materials in a cool, dry, well-ventilated area. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. No smoking, naked lights, heat or ignition sources. Protect from light. DO NOT store above 50 deg. C.

Conditions for safe storage, including any incompatibilities

Suitable container	 Packing as supplied by manufacturer. Plastic containers may only be used if approved for flammable liquid. Check that containers are clearly labelled and free from leaks. For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure. For materials with a viscosity of at least 2680 cSt. (23 deg. C) For manufactured product having a viscosity of at least 250 cSt.
Storage incompatibility	Avoid reaction with oxidising agents acids peroxides

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	ethanol	Ethyl alcohol	1880 mg/m3 / 1000 ppm	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1		TEEL-2	TEEL-3
ethanol	Ethyl alcohol; (Ethanol)	Not Available		Not Available	Not Available
Ingredient	Original IDLH		Revised	Revised IDLH	
butoxycarbonylmethyl butyl phthalate	Not Available		Not Available		
ethanol	15,000 ppm		3,300 [LE	[L] ppm	

Exposure controls

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

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Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment Personal protection Safety glasses with side shields Chemical goggles Eye and face protection Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task Skin protection See Hand protection below ▶ Wear chemical protective gloves, e.g. PVC. Hands/feet protection ▶ Wear safety footwear or safety gumboots, e.g. Rubber **Body protection** See Other protection below Overalls. PVC Apron. Other protection ▶ PVC protective suit may be required if exposure severe. ► Eyewash unit. Thermal hazards Not Available

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:

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Material	СРІ
BUTYL	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NITRILE	С
NITRILE+PVC	С
PE/EVAL/PE	С
PVC	С

^{*} CPI - Chemwatch Performance Index

A: Best Selection

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.

Respiratory protection

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

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

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

* - Continuous Flow ** - Continuous-flow or positive pressure demand A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, colourless flammable liquid with a characteristic odour; partly miscible in water.			
Physical state	Liquid	Relative density (Water = 1)	1.0	
Odour	Not Available	Partition coefficient n-octanol / water	Not Available	
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available	
pH (as supplied)	Not Available	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)	30	Taste	Not Available	
Evaporation rate	Not Available	Explosive properties	Not Available	
Flammability	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)	Not Available	

B: Satisfactory; may degrade after 4 hours continuous immersion

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Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Partly Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	1.6 (ethanol)	VOC g/L	1069.31

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

ssive due to slow oral absorption and metabolism. Absorption is affected by fat in the diet. Repeated doses can cause is include an enlarged liver which often reverses if exposure is maintained. Carbohydrate metabolism is disrupted, and is blood falls. adverse health effects or skin irritation following contact (as classified by EC Directives using animal models), adverse health effects or skin irritation following contact (as classified by EC Directives using animal models), acquires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting, or example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use arral damage is suitably protected. Exe suggests, that the material may cause eye irritation in a substantial number of individuals. Prolonged eye contact may a temporary redness of the conjunctiva (similar to windburn). Body, may occur and may cause some concern following repeated or long-term occupational exposure. Periods may cause physical defects in the developing embryo (teratogenesis). IRRITATION Not Available IRRITATION IRRITATION
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Not Available
IRRITATION
Not Available
IRRITATION Eye (rabbit): 500 mg SEVERE
Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data oxic Effect of chemical Substances
r ^{[2} [1]

BUTOXYCARBONYLMETHYL **BUTYL PHTHALATE**

The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce

Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).

Foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, **ETHANOL** scaling and thickening of the skin.

Acute Toxicity	0	Carcinogenicity	0
Skin Irritation/Corrosion	0	Reproductivity	0
Serious Eye Damage/Irritation	0	STOT - Single Exposure	0
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0

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Legena:

 Data available but does not ill the office.

 Data required to make classification available Dala avallable bul udes nol IIII the Untena ior Gassilication

N - Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
butoxycarbonylmethyl butyl phthalate	LC50	96	Fish	3.559mg/L	3
butoxycarbonylmethyl butyl phthalate	EC50	96	Algae or other aquatic plants	0.307mg/L	3
ethanol	LC50	96	Fish	42mg/L	4
ethanol	EC50	48	Crustacea	2mg/L	4
ethanol	EC50	96	Algae or other aquatic plants	17.921mg/L	4
ethanol	EC50	24	Algae or other aquatic plants	0.0129024mg/L	4
ethanol	NOEC	2016	Fish	0.000375mg/L	4
Legend:	Aquatic Toxicity Data (E	,	gistered Substances - Ecotoxicological Infon ase - Aquatic Toxicity Data 5. ECETOC Aqua Data 8. Vendor Data	, ,	

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
butoxycarbonylmethyl butyl phthalate	LOW (Half-life = 14 days)	LOW (Half-life = 3.07 days)
ethanol	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)

Bioaccumulative potential

Ingredient	Bioaccumulation	
butoxycarbonylmethyl butyl phthalate	MEDIUM (LogKOW = 4.1506)	
ethanol	LOW (LogKOW = -0.31)	

Mobility in soil

Ingredient	Mobility
butoxycarbonylmethyl butyl phthalate	LOW (KOC = 14830)
ethanol	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging

- ▶ Recycle wherever possible or consult manufacturer for recycling options.
- ► Consult State Land Waste Management Authority for disposal.
- Recycle containers if possible, or dispose of in an authorised landfill.
- ► Containers may still present a chemical hazard/ danger when empty. ▶ Return to supplier for reuse/ recycling if possible.

disposal

- ▶ If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- ▶ Where possible retain label warnings and SDS and observe all notices pertaining to the product.

SECTION 14 TRANSPORT INFORMATION

Labels Required



Marine Pollutant
HAZCHEM

NO

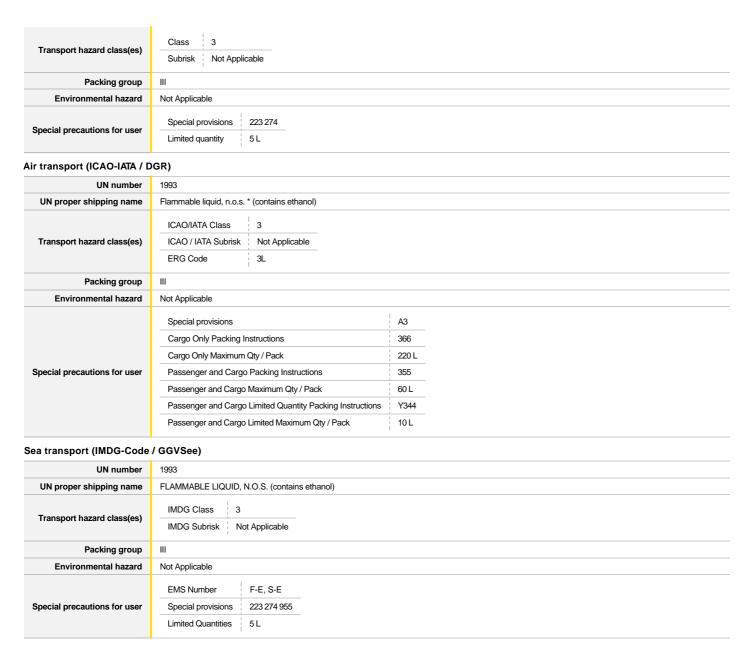
•3Y

Land transport (ADG)

UN number	
UN proper shipping name	

FLAMMABLE LIQUID, N.O.S. (contains ethanol)

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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

BUTOXYCARBONYLMETHYL BUTYL PHTHALATE(85-70-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

\parallel ETHANOL(64-17-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists

National Inventory	Status	
Australia - AICS	Υ	
Canada - DSL	N (butoxycarbonylmethyl butyl phthalate)	
Canada - NDSL	N (ethanol)	
China - IECSC	N (butoxycarbonylmethyl butyl phthalate)	
Europe - EINEC / ELINCS / NLP	Y	
Japan - ENCS	Υ	
Korea - KECI	Υ	
New Zealand - NZIoC	Y	
Philippines - PICCS	N (butoxycarbonylmethyl butyl phthalate)	

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USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = 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

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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net

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

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value BCF: BioConcentration Factors

BEI: Biological Exposure Index

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