Safety data sheet
according to 1907/2006/EC, Article 31

Version: 2 Revision 06.06.2017

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

· **1.1 Product identifier**

· **Product name: LiquiLube**

· **Product identifier**
High Molecular Weight C10 Based Phthalate
CAS No.: 53306-54-0
EC No.: 258-469-4

· **Registration number** 01-2119446694-30-0003

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

· **Industrial use**
Industrial manufacturing
Manufacture of substances
Use:
as an intermediate
in laboratories
for polymer processing through compounding, calendering, spread coating, extrusion, injection moulding, low energy manipulations
for formulation of plastisol
for formulation of DPHP in dry blends

· **Professional use**
Use:
for polymer processing through low energy manipulations

· **Consumer use**
for service life, contained in articles
for service life, contained in medical devices

· **Uses advised against** Not identified.

· **Application of the substance / the mixture** Plasticizer

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**
Liquimix Pty Ltd - 24 Rosa Place - Richlands 4077 QLD - Australia
Tel. 07 3277 6655
Fax. 07 3009 0558
www.Liquimix.com

· **Further information obtainable from:** producinfo@perstorp.com

· **1.4 Emergency telephone number:**
Tel. 07 3277 6655

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified according to the CLP regulation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008** Not applicable.

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· **Hazard pictograms** Not applicable.
· **Signal word** Not applicable.
· **Hazard statements** Not applicable.
· **Precautionary statements** Not applicable.
· **Hazard description:** No special hazards are associated with this product.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** No.
· **vPvB:** No.

SECTION 3: Composition/information on ingredients

· **3.1 Substances** Yes.

· **Chemical components:**		
CAS: 53306-54-0 EINECS: 258-469-4 Reg.nr.: 01-2119446694-30-0003	High Molecular Weight C10 Based Phthalate	100%

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **After inhalation:** First aid measures not required, but get fresh air for personal comfort.
· **After skin contact:**
First aid measures not required, but wash exposed skin with soap and water for hygienic reasons.
· **After eye contact:** Rinse opened eye under running water.
· **After swallowing:** If a large quantity has been ingested or you feel unwell, get medical advice/attention.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
All types of extinguishing media are suitable. Use fire extinguishing methods suitable to surrounding conditions.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
Carbon dioxide (CO2)
· **5.3 Advice for firefighters**
· **Protective equipment:**
Do not inhale explosion gases or combustion gases.
Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
Wear safety glasses, gloves, protective clothing and rubber boots for hygienic reasons.
· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Small spill:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Large spill:
Pump up the product into a spare container suitably labelled.
Clean the affected area carefully; suitable cleaners are:
warm water and cleansing agent
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
· **Information about fire - and explosion protection:** Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:** Store in cool, dry place in tightly closed receptacles.
· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:** Not required.

· **DNELs**		
High Molecular Weight C10 Based Phthalate		
Oral	DNEL long term syst.	4.9 mg/kg bw/d (general public)
Dermal	DNEL long term syst.	102.08 mg/kg bw/d (workers)
		61.25 mg/kg bw/d (general public)
Inhalative	DNEL long term syst.	28.8 mg/m³ (workers)
		8.52 mg/m³ (general public)

· **PNECs**
The test substance does not produce acute or chronic toxicity in freshwater aquatic organisms (fish, invertebrates, and an alga) within the range of water solubility. Consequently, neither the NOEC nor the freshwater compartment PNEC values can be experimentally determined.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
· **Respiratory protection:** Not necessary if room is well-ventilated.
· **Protection of hands:**
Protective gloves not really required. However, we recommend using protective gloves made of rubber.

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· **Material of gloves**
Nitrile rubber, NBR
Chloroprene rubber, CR
Butyl rubber, BR
· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Not suitable are gloves made of the following materials:** PVC gloves
· **Eye protection:**

Safety glasses

· **Body protection:** Normal work clothes for the chemical industry (long legs and sleeves).
· **Limitation and supervision of exposure into the environment** Not applicable.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Liquid
Colour:	Colourless
· **Odour:**	Faint
· **Odour threshold:**	Not applicable.
· **pH-value at 20 °C:**	neutral
· **Change in condition**	
Melting point/Melting range:	-48 °C (DIN 3016)
Boiling point/Boiling range:	252-253 °C (7 mbar, DIN 51751)
· **Flash point:**	220 °C (closed cup, ISO 2719:200)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	345 °C (DIN 51794)
· **Danger of explosion:**	Not explosive.
· **Explosion limits:**	Not applicable.
· **Oxidizing properties**	Not oxidizing.
· **Vapour pressure at 20 °C:**	0.000000037 Pa (EU Method A.4)
· **Density at 20 °C:**	0.960 g/cm³ (OECD 109)
· **Solubility in / Miscibility with water at 25 °C:**	< 0.0001 µg/l (EU Method A.6)
· **Partition coefficient (n-octanol/water) at 25 °C:**	>>6 log POW (EU Method A.8)
· **Viscosity:**	
Dynamic at 20 °C:	115-130 mPas
· **9.2 Other information**	No further relevant information available.

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SECTION 10: Stability and reactivity

· **10.1 Reactivity**
There exists no specific test data for this product. For further information, see the subsequent subsections of this chapter.
· **10.2 Chemical stability** The product is stable at normal conditions.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** None known.
· **10.5 Incompatible materials:** None known.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values:**		
High Molecular Weight C10 Based Phthalate		
Oral	LD50	> 5000 mg/kg (rat) (OECD 401)
Dermal	LD0	> 2000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/1h	> 20.5 mg/l (rat) (OECD 401)

· **Primary irritant effect:**
· **on the skin:**
No irritating effect.
(OECD 404)
· **on the eye:**
No irritating effect.
(OECD 405)
· **Sensitisation** No skin sensitisation. (OECD 406)

· **Repeated dose toxicity**		
High Molecular Weight C10 Based Phthalate		
Oral	NOAEL/90d	39 mg/kg bw/d (rat) (OECD 408)

· **Carcinogenicity:** No carcinogenic effects have been observed.
· **Mutagenicity:**
The product is not considered to be mutagenic.
Not mutagenic in Bacterial Reverse Mutation Assay. (OECD 471)
The substance is not clastogenic. Mammalian Chromosomal Aberration Test (OECD 473).*
Not mutagenic in in vivo Mammalian Erythrocyte Micronucleus Test. (OECD 474) *

· **Reproductive toxicity:**		
High Molecular Weight C10 Based Phthalate		
Oral	NOAEL (P)	600 mg/kg bw/day (rat) (OECD 416)
	NOAEL (F1)	200 mg/kg bw/day (rat) (OECD 416)
	NOAEL (F2)	200 mg/kg bw/day (rat) (OECD 416)

· **Remark:** * read-across from supporting substance (structural analogue)

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SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:**
Low toxicity to aquatic organisms.

High Molecular Weight C10 Based Phthalate	
EC50/48h	> 100 mg/l (Daphnia magna) (EU Method C.2)
EC50/72h	> 100 mg/l (Desmodesmus subspicatus) (EU Method C.3)
LC50/96h	> 10 000 mg/l (Danio rerio) (OECD 203)

· **12.2 Persistence and degradability**
The product is readily biodegradable.

High Molecular Weight C10 Based Phthalate	
BOD28	80-90 % (-) (OECD 301B)

· **12.3 Bioaccumulative potential**
Food web studies indicate that higher molecular phtalate esters do not bioaccumulate. Instead these substances exhibit decreasing concentrations from lower to higher trophic levels.

High Molecular Weight C10 Based Phthalate	
BCF	76.4 (-) (EpiWin calculation)
	< 14.4* (Cyprinus carpio) (OECD 305)
log Pow	>>6 (-) (EU Method A.8)

· **12.4 Mobility in soil**
The substance has very low water solubility and a high potential of adsorption which indicates a very low mobility in soil.

High Molecular Weight C10 Based Phthalate	
Log Koc	> 5.63 (-) (OECD 121)

· **Ecotoxicological effects:**

· **Behaviour in sewage processing plants:**	
High Molecular Weight C10 Based Phthalate	
EC50/3h	> 1000 mg/l (activated sludge) (EU Method C.11)

· **Additional ecological information:**
· **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** No.
· **vPvB:** No.
· **12.6 Other adverse effects** No further relevant information available.
· **Remark:** * read-across from supporting substance (structural analogue)

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods** The product is not classified as hazardous waste.

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· **Recommendation** Smaller quantities can be disposed of with household waste.

· **European waste catalogue**	
16 03 06	organic wastes other than those mentioned in 16 03 05

· **Uncleaned packaging:**
Thoroughly emptied and clean packaging may be recycled.
Contaminated packaging materials must be disposed of in the same manner as the product.
· **Recommendation:** Disposal must be made according to official regulations.

*

SECTION 14: Transport information

· **14.1 UN Number**	
· **ADR, ADN, IMDG, IATA**	-
· **14.2 Proper shipping name (Technical Name)**	
· **ADR, ADN, IMDG, IATA,LIQUILUBE**	-
· **14.3 Transport hazard class(es)**	
· **ADR, ADN, IMDG, IATA**	
· **Class**	-
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	-
· **14.5 Environmental hazards:**	Not applicable.
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Marpol Annex II classification X According to IBC: Shipping name Dialkyl (C7-C13) Phthalates
· **Transport/Additional information:**	Not dangerous goods according to the above specifications.

SECTION 15: Regulatory information

· **Registration number** 01-2119446694-30-0003

· **National regulations:**
· **Other regulations, limitations and prohibitive regulations** Not applicable.
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This Safety Data Sheet is not a Product Specification. It is based on our present knowledge and experience and it is intended to serve as a guide for safe handling of the product regarding to health and environmental aspects.

· **Department issuing SDS:** Liquimix
· *** Data compared to the previous version altered.**