



## SAFETY DATA SHEET

<b>Section 1.</b>	<b>Identification of the material and the supplier</b>
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Product:	<b>Humectant</b>
Product Use:	Embalming fluid
Restriction of Use in NZ:	Refer to Section 15
<b>New Zealand Supplier:</b>	<b>Thirty SixPlus Embalmers</b>
Address:	18 Norman Spencer Drive Manukau City Auckland 2104
Telephone:	0800 362 256
Fax:	+64 9 262 3705
<b>Emergency No:</b>	<b>0800 764 766 (National Poison Centre)</b>
<b>Australia Supplier:</b>	<b>XXX</b> XXX XXX
Tel:	+61 XXX
<b>Australian Emergency No</b>	<b>13 11 26 (National Poison Centre)</b>
Date of SDS Preparation:	14 January 2020

<b>Section 2.</b>	<b>Hazards Identification</b>
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**Australia:**  
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

**New Zealand:**  
This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

**EPA Approval No:** Embalming Products (Subsidiary)- HSR002565

**Pictograms**



Chronic



Corrosive

Signal Word: **DANGER**

NZ HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E (asp)	H304	May be fatal if swallowed and enters	Asp. Tox. 1

		airways.	
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.9B	H373	May cause damage to organs through prolonged or repeated exposure.	STOT RE 2
8.3A	H318	Causes serious eye damage.	Eye Corr. 1

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fume, vapours, spray.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P331	Do NOT induce vomiting.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/attention.

Storage Code	Storage Statement
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

### Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Paraffin oils	10-20	8012-95-1
Triethanolamine	<10	102-71-6
Diethanolamine	<5	111-42-2
Non-Hazardous	To bal	

### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
If on Skin	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: get medical advice/attention.
If Swallowed	Do not induce vomiting. Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Immediately call a POISON CENTER or doctor/physician as this is an aspiration hazard.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

## Most important symptoms and effects, both acute and delayed

Symptoms:

**Ingestion:** May be fatal if swallowed and enters airways. Refer to Section 11

**Inhalation:** Not applicable.

**Skin:** Causes mild skin irritation.

**Eye:** Causes serious eye damage.

### Section 5. Fire Fighting Measures

<b>Hazard Type</b>	Liquid and vapour are flammable.
<b>Hazards from combustion products</b>	Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). May emit acrid smoke. Mists containing combustible materials may be explosive. Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.
<b>Suitable Extinguishing media</b>	Foam. dry chemical powder, BCF (where regulations permit), Carbon dioxide. Water spray or fog
<b>Precautions for firefighters and special protective clothing</b>	Wear full body protective clothing with breathing apparatus. May be violently or explosively reactive. Prevent, by any means available, spillage from entering drains or water course. 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.
<b>HAZCHEM CODE</b>	<b>None allocated</b>

### Section 6. Accidental Release Measures

#### Personal precautions:

Use protective clothing as detailed in Section 8. Avoid breathing vapours and contact with skin and eyes. Clear area of personnel and move upwind. Remove sources of ignition. Slippery when wet.

#### Environmental precautions:

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

#### Spill and Disposal procedures:

Contain and absorb small quantities with vermiculite or other absorbent material. Dispose of waste safely, according to local Council regulations detailed in Section 13.

### Section 7. Handling and Storage

#### Precautions for Handling:

- Read label before use.
- Do not breathe fume, vapours, spray.
- DO NOT allow clothing wet with material to stay in contact with skin
- 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.
- Wear protective clothing as detailed in Section 8.

#### Precautions for Storage:

- Keep out of reach of children.
- Store locked up.
- Store in the original container.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.

- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.

**Suitable Containers:**

- Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

**Storage Incompatibilities:**

CARE: Water in contact with heated material may cause foaming or a steam explosion with possible severe burns from wide scattering of hot material. Resultant overflow of containers may result in fire.

- Avoid contact with copper, aluminium and their alloys.
- Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.
- Avoid reaction with oxidising agents

**Section 8 Exposure Controls / Personal Protection**

**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Triethanolamine [102-71-6]		5		
Oil mist, mineral [8012-95-1]		5(om)		10
Diethanolamine (skin) [111-42-2]	3	13		

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11TH EDITION.

**Engineering Controls**

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

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. 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.

**Personal Protection Equipment**



<b>Eyes</b>	Chemical goggles. Safety glasses with side shields. 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. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available.
<b>Hands</b>	Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber

<b>Skin</b>	Overalls, PVC apron. Barrier Cream and skin cleaning cream.
<b>Respiratory</b>	Type AEK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)
<b>General</b>	Ensure there is ready access to a safety shower and eyewash unit.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Liquid; mixes with water.
<b>Colour</b>	Pink
<b>Odour</b>	No odour
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not available
<b>Boiling Point</b>	100°C
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	85°C(TCC)
<b>Flammability</b>	Non Flammable
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	<2 kPa
<b>Vapour Density (Air=1)</b>	Not available
<b>Relative Density (Water=1)</b>	0.97
<b>Water Solubility</b>	Miscible
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Characteristics</b>	Not available
<b>Volatile Component (%vol)</b>	>50

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Not available
<b>Conditions to Avoid</b>	None known.
<b>Incompatible Materials</b>	Avoid strong acids, bases. Avoid contact with copper, aluminium and their alloys. Avoid reaction with oxidising agents
<b>Hazardous Decomposition Products</b>	None known.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Not triggered. Ingestion of triethanolamine may cause gastro-intestinal irritation with bleeding, burning or painful sensations in the mouth, throat, chest and abdomen, vomiting and diarrhoea. Animal testing has also shown sluggishness, excessive tear secretion, hairs standing up, unsteady gait, and red/brown discharge on hair around the nose and genitals. Lethal dose in 70 kg man is 560gms.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not triggered, however there is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

	Rats exposed to triethanolamine for six hours showed no abnormality.
<b>Eye</b>	Causes serious eye irritation.
<b>Skin</b>	Causes mild skin irritation. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Open cuts, abraded or irritated skin should not be exposed to this material The material may accentuate any pre-existing dermatitis condition 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 exposure to triethanolamine may cause slight irritation with itching, local redness, swelling and tissue destruction, sensitisation (in a small proportion of individuals), and reddened blisters. Exposure of animals to toxic levels of triethanolamine may cause sluggishness, unsteady gait, emaciation and discolouration of body organs.

#### Chronic Effects:

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	May be fatal if swallowed and enters airways.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Causes damage to organs through prolonged or repeated exposure.

#### Individual component information:

##### Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
paraffin oils	>24000 mg/kg(rat)	-	2062 ppm/4H (rat)
diethanolamine	677.04kg (rat)	8342.88 mg/kg (rabbit)	64000 ppm/4h (rat)
Triethanolamine	5559.6mg/kg (female)(rat)	>18080 mg/kg (rat)	-

<b>PARAFFIN OILS</b>	<p>The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives; The potential toxicity of a specific distillate base oil is inversely related to the severity or extent of processing the oil has undergone, since: The adverse effects of these materials are associated with undesirable components, and The levels of the undesirable components are inversely related to the degree of processing; Distillate base oils receiving the same degree or extent of processing will have similar toxicities; The potential toxicity of residual base oils is independent of the degree of processing the oil receives. The reproductive and developmental toxicity of the distillate base oils is inversely related to the degree of processing. Unrefined &amp; mildly refined distillate base oils contain the highest levels of undesirable components, have the largest variation of hydrocarbon molecules and have shown the highest potential carcinogenic and mutagenic activities. Highly and severely refined distillate base oils are produced from unrefined and mildly refined oils by removing or transforming undesirable components. In comparison to unrefined and mildly refined base oils, the highly and severely refined distillate base oils have a smaller range of hydrocarbon molecules and have demonstrated very low mammalian toxicity. Mutagenicity and carcinogenicity testing of residual oils has been negative, supporting the belief that these materials lack biologically active components or the components are largely non-bioavailable due to their molecular size. Equivocal tumorigen by RTECS criteria</p>
<b>TRIETHANOLAMINE</b>	<p>The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. Lachrymation, diarrhoea, convulsions, urinary tract changes, changes in bladder weight, changes in testicular weight, changes in thymus weight, changes in liver weight, dermatitis after systemic exposure, kidney, ureter, bladder tumours recorded. Equivocal tumourigen by RTECS criteria. Dermal rabbit value quoted above is for occluded patch in male or female animals * Union Carbide</p>

**DIETHANOLAMINE**

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. 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. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases.

**Section 12. Ecotoxicological Information****Toxicity:  
for lubricating oil base stocks:**

Vapor Pressure Vapor pressures of lubricating base oils are reported to be negligible. In one study, the experimentally measured vapour pressure of a solvent-dewaxed heavy paraffinic distillate base oil was  $1.7 \times 10^{-4}$  Pa . Since base oils are mixtures of C15 to C50 paraffinic, naphthenic, and aromatic hydrocarbon isomers, representative components of those structures were selected to calculate a range of vapor pressures. The estimated vapor pressure values for these selected components of base oils ranged from  $4.5 \times 10^{-1}$  Pa to  $2 \times 10^{-13}$  Pa. Based on Dalton's Law the expected total vapour pressure for base oils would fall well below minimum levels ( $10^{-5}$  Pa) of recommended experimental procedures.

Partition Coefficient (log Kow): In mixtures such as the base oils, the percent distribution of the hydrocarbon groups (i.e., paraffins, naphthenes, and aromatics) and the carbon chain lengths determines in-part the partitioning characteristics of the mixture.

<b>Persistence and degradability</b>	No data available
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available

**Individual component information:****Persistence and degradability**

Ingredient	Persistence: Water/Soil	P
diethanolamine	LOW (Half-life = 14 days)	LOW (Half-life = 0.3 days)
triethanolamine	LOW	LOW

**Bioaccumulative potential**

Ingredient	B
diethanolamine	LOW (BCF = 1)
triethanolamine	LOW (BCF = 4)

**Mobility in soil**

Ingredient	M
diethanolamine	HIGH (KOC = 1)
triethanolamine	LOW (KOC = 10)

**Section 13. Disposal Considerations****Disposal Method:**

Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container cannot 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 MSDS and observe all notices pertaining to the product.

Triple rinse and dispose according to Local Regulations.

**Precautions or methods to avoid:** None known.

**Section 14 Transport Information**

Product Name: Humectant  
Date of SDS: 14 January 2020

Prepared by: Technical Compliance Consultants (NZ) Ltd  
Tel: 64 9 475 5240 www.techcomp.co.nz

**This product is NOT classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition).**

**This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012**

## **Section 15 Regulatory Information**

### **Australia:**

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a Schedule 5 Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

### **New Zealand:**

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: Embalming Products (Subsidiary) – HSR002565

HSNO Classification: 3.1C, 6.1D(Inh), 6.1E(Oral), 6.3B, 6.4A, 6.5B, 6.6B, 6.7A, 6.8B, 6.9B, 9.2C

<b>HSW (HS) Regulations 2017 and EPA Notices</b>	<b>Trigger Quantity</b>
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L (8.3A)
Emergency Response Plan	10 000L (8.3A)
Secondary Containment	10 000L (8.3A)
Restriction of Use	Only use for the intended purpose.

## **Section 16 Other Information**

### **Glossary**

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

### **References:**

#### **Australia:**

1. Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
2. Standard for the Uniform Scheduling of Medicines and Poisons.
3. Australian Code for the Transport of Dangerous Goods by Road & Rail.
4. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
5. Workplace exposure standards for airborne contaminants, Safe work Australia.

Product Name: Humectant  
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Prepared by: Technical Compliance Consultants (NZ) Ltd  
Tel: 64 9 475 5240 www.techcomp.co.nz



6. American Conference of Industrial Hygienists (ACGIH).
7. Globally Harmonised System of classification and labelling of chemicals.

New Zealand:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the Australian Manufacturer or New Zealand distributor, if further information is required.

Issue Date:                    14 January 2020                    Review Date:                    14 January 2025