



Section 1 Chemical Product and Company Identification

Product:	Lightclean
Product Code:	LCW
Product Use:	Specialised cleaner (underwater lights)
Supplier:	Oceanmax International Ltd PO Box 83 232 Edmonton Auckland 0652 New Zealand www.oceanmax.com Telephone: 0800 5377 3835 (NZ only) +64 27 200 4228 (International) Fax: +64 9 813 5246
24 Hour Emergency Response Telephone:	+64 274 337 928 (24 hours, 365 days)
NZ National Poisons Centre Telephone:	0800 POISON (0800 764 766)
Date of SDS Preparation:	26 October 2017

Section 2 Hazards Identification

Hazardous Status	Classified as hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
EPA Approval Code:	Cleaning Products Flammable – HSR002530 Flammable liquid and Vapour, Cat 3 Acute Toxicity (oral), Cat 5 Acute Toxicity (inhalation), Cat 3
GHS Certificate:	Acute Toxicity (dermal), Cat 5 Skin irritation, Cat 2 Eye irritation, Cat 1

GHS Pictograms:



GHS Signal Word:

WARNING

HSNO Classification	Hazard Code	Hazard Statement	Category
3.1C	H226	Flammable liquid and vapour	2
6.1E Inhalation (vapours, dusts or mists)	H303	May be harmful if swallowed	3
6.3A	H313	May be harmful in contact with skin	5
6.4A	H316	Causes mild skin irritation	2
6.8B	H320	Causes eye irritation	1
9.1D	H331	Toxic if inhaled	3

Precautionary Statements	Prevention
P103	Read label before use.
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 equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Do not breathe mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response Code	Response Statement
P303 + P361 + P353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P311	Call a POISON CENTER or doctor/physician.
P321	Specific treatment (see supplemental First Aid instructions on this SDS).
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use foam, carbon dioxide or dry chemical powder to extinguish

Storage Code	Storage Statement

P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Disposal Code	Disposal Statement
P501	Do not let this product enter the environment. Do not dispose of in waterways or sewers. Dispose of this material and its container as hazardous waste, via a licensed hazardous waste contractor. See local council for disposal/recycling information.

Section 3 Composition/Information On Ingredients

NAME	CAS Number	%
<i>tert</i> -Butyl Acetate (TBAC)	540-88-5	≥99.9

Section 4 First Aid Measures

If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.
In case of eye contact	Flush eyes with water as a precaution.
In case of skin contact	Wash with soap and plenty of water. Consult a physician.
Inhaled	If breathed in, move person to fresh air. If not breathing give artificial respiration. Consult a physician.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media	Water spray, alcohol resistant foam, Carbon dioxide, dry chemical powder.
Fire Fighting	<ul style="list-style-type: none"> Alert Fire Brigade and tell them location and nature of hazard. Wear self-contained breathing apparatus for firefighting if necessary. Use water spray to cool unopened containers. On combustion, may emit toxic fumes of carbon oxides (CO₂, CO).

Section 6 Accidental Release Measures

Minor Spills	<ul style="list-style-type: none"> -Remove all ignition sources. -Clean up all spills immediately. -Avoid breathing vapours and contact with skin and eyes. -Control personal contact by using protective equipment. -Contain and absorb small quantities with vermiculite or other absorbent material. -Wipe up. -Collect residues in a flammable waste container.
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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.
- Prevent, by any means available, spillage from entering drains or water course.
- No smoking, naked lights or ignition sources.
- Increase ventilation.
- Stop leak if safe to do so.
- Water spray or fog may be used to disperse/absorb vapour.
- Contain spill with sand, earth or vermiculite.
- Use only spark-free shovels and explosion proof equipment.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

Section 7

Handling and Storage

Procedure for Handling

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps
- DO NOT enter confined spaces until atmosphere has been checked.
- Avoid smoking, naked lights, heat or ignition sources.
- When handling, DO NOT eat, drink or smoke.
- Vapour may ignite on pumping or pouring due to static electricity.
- Use spark-free tools when handling.
- Avoid contact with incompatible materials.
- Keep containers securely sealed.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

Storage Requirements

- Store in original containers in approved flame-proof area.
- No smoking, naked lights, heat or ignition sources.
- Keep containers securely sealed.
- Store away from incompatible materials in a cool, dry well ventilated area.
- Protect containers against physical damage and check regularly for leaks.

Section 8

Exposure Controls / Personal Protection

Occupational exposure limits

tert-Butyl acetate (TBAC)

[540-88-5]

Occupational exposure limits
(WES-TWA)

200ppm 950 mg/m³

(According to the New Zealand Workplace Exposure Standards for Atmospheric Contaminants.)

Personal Protection

Eyes	<ul style="list-style-type: none"> • Safety glasses with side shields; or as required. • Chemical goggles. • Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.
Hands/Feet	<ul style="list-style-type: none"> • Wear chemical protective gloves, e.g. nitrile gloves • Inspect gloves prior to use and ensure proper glove removal technique to avoid skin contact with contaminated surfaces. • Dispose of contaminated gloves according to local laws and good workplace practices. • Wash and dry hands. • Wear safety footwear.
Body protection	<ul style="list-style-type: none"> • Impervious protective clothing for small quantities. • Consider wearing flame retardant anti-static protective equipment if working with larger quantities.
Respiratory protection	<ul style="list-style-type: none"> • Avoid generating and breathing mist and vapour. • If applicable to use an air-purifying respirator approved by government standards NIOSH (US) or CEN (EU).
Engineering Controls	<ul style="list-style-type: none"> • None required when handling small quantities. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

Section 9 Physical and Chemical Properties

Appearance:	Colourless Liquid
Odour:	Fruity
Odour Threshold:	Data not available
pH (at 20°C):	Data not available
Melting Point/Freezing Point (°C):	-58
Initial Boiling Point & Boiling Range (°C):	97-98
Flash Point (°C):	4 (closed cup)
Flammability (solid, gas):	Data not available
Explosive Limits:	1.5-1.7 vol% (lower limit)
Vapour Pressure (kPa) at 20°C:	5.6
Vapour Density:	4.65 (air = 1)
Relative Density:	0.866 g/cm ³
Solubility(ies):	Partially soluble in water (≈ 6.7 g/L)
Partition Co-efficient n-octanol/water:	Log P _{ow} = 1.64 at 21.7°C
Auto-ignition Temperature:	589°C at 101.5 kPa
Decomposition Temperature:	Data not available
Kinetic Viscosity:	Data not available
Particle Characteristics:	Data not available
Evaporation Rate:	3.2 Fast
Specific Gravity at 20°C:	0.8665 (water = 1)

Section 10 Chemical Stability and Reactivity Information

Conditions Contributing to instability	<ul style="list-style-type: none"> • Product is considered stable. • Hazardous polymerization will not occur. • Avoid heat, flames and sparks
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Incompatibility Oxidizing agents
Decomposition products Carbon oxides (CO, CO₂)

Section 11 Toxicological Information

Toxicity		Irritation	
Oral (male rat) LD50	4100 mg/kg	Skin (rabbit)	No skin irritation (4 h)
Inhalation	No data available	Eye (rabbit)	No eye irritation (72 h)
Dermal (rabbit) LD50:	>2000 mg/kg		

Section 12 Ecological Information

Toxicity Fish (rainbow trout) LC50(96): 240 mg/L

Toxicity Arthropoda (water flea) EC50(48) 350 g/L/48Hr

Water No data.

Mobility No data.

Degradability Aerobic – exposure time 28 days
Result: 50% (inherently biodegradable).

Bioaccumulation No data.

Section 13 Disposal Considerations

- Product**
- Consult manufacturer for recycling options and recycle where possible.
 - Consult State Land Waste Management Authority for disposal.
 - Incinerate residue at an approved site. Use chemical incinerator equipped with an afterburner and scrubber. Exert extra care during ignition as this material and vapour is flammable.
 - Recycle containers if possible, or dispose of in an authorized landfill.
- Contaminated packaging**
- Consult manufacturer for recycling options and recycle where possible.
 - Dispose of according to local regulations

Section 14 Transport Information

UN Number 1123
 Proper Shipping Name BUTYL ACETATES
 Class 3
 ADR Number 33
 Packing Group II
 Labels Required Flammable Liquid
 Additional Shipping Information International Transport Regulations
 IMO 3
 Hazchem 3YE
 Marine Pollutant No



Section 15 Regulatory Information

Group Standard: **HSR002530 – Cleaning Products Flammable**
HSNO Classification: 3.1C, 6.1E, 6.3A, 6.4A, 6.8B, 9.1D
HSNO Controls: **Tracking** Not required.

Approved Handler

Not required.

Section 16 Other Information

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

Disclaimer:

This document is based on information concerning the product which has been provided to the manufacturer 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 Oceanmax has 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, Oceanmax accepts 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.

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NEW ZEALAND POISONS INFORMATION CENTRE
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NZ EMERGENCY SERVICES: 111

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