LIGHTCLEAN
Safety Data Sheet

Section 1 - Identification of the Material and the Supplier

1.1 Product identifier

Product name	Lightclean
Catalog No.	LCW Foulfree kit LSP15K, LSPKIT
CAS No.	540-88-5

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

Identified uses	Protective coating for transducers
Restrictions of use	Refer to Section 15

1.3 Details of the supplier of the Safety Data Sheet

Supplier	Propspeed USA Inc. 8333 NW 53rd Street Suite 450 Doral, FL 33166 USA **www.propspeed.com** +1 754 346 4466

1.4 Emergency telephone number

Emergency Response Telephone (24 hours, 365 days)	USA & Canada - Call CHEMTREC Toll Free: 1-800-424-9300 +1-703-527-3887 New Zealand 0800 243 622 Australian 1800 127 406 Global Access +64 4 917 9888
NZ National Poisons Centre Telephone	0800 POISON (0800 764 766)
Date of SDS Preparation	29 April 2024, Version 2

Section 2 - Hazards identification

2.1 GHS Classification

Flammable liquids	Category 2
Acute toxicity; Inhalation	Category 4
Specific target organ toxicity - single exposure	Category 3

2.2 GHS labeling

Symbols:

GHS Signal word: **Danger**

Hazard statements:
[H-Code: Hazard information]
H225: Highly flammable liquid and vapour.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.

Precautionary statements:
[P-Code: Safety information]
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 equipment.
P242: Use only non-sparking tools.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response
P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
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 comfortable for breathing.
P312: Call a POISON CENTER/doctor if you feel unwell.

Storage
P403 + P235: Store in a well-ventilated place. Keep cool.
P405: Store locked up.
Disposal
P501: Dispose of contents/container to an approved waste disposal plant.

2.3 Other hazards

Repeated exposure may cause skin dryness or cracking.

Section 3 - Composition/information on ingredients

3.1 Substances

Chemical nature: Substance

Component

Ingredient name	CAS No. EC-No.	Weight%	Component type
Tert-Butyl acetate	540-88-5	> 99.5 %	Substance
t-Butyl Alcohol	75-65-0	< 0.5 %	Impurity
2,4,4-Trimethyl-1-pentene	107-39-1	< 0.5 %	Impurity

Section 4 - First aid measures

4.1 Description of first aid measures

General information:
Consult a physician/doctor if necessary. Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Show this material safety data sheet to the doctor in attendance.

Following inhalation:
If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Call a physician.

Following skin contact:
Remove contaminated clothing as needed. Wash skin thoroughly with mild soap and water. Flush with lukewarm water for 15 minutes. If sticky, use waterless cleaner first. Seek medical attention if ill effect or irritation develops.

Following eye contact:
Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Following ingestion:
If large quantity swallowed, give lukewarm water (pint/ 1/2 liter) if victim completely conscious/alert. Do not induce vomiting. Risk of damage to lungs exceeds poisoning risk. Obtain emergency medical attention.

Notes to physician:

Symptoms
If inhalation occurs signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and/or fever.
High doses may cause CNS depression (fatigue, dizziness and possibly loss of concentration, with collapse, coma and death in cases of severe over-exposure).
The onset of respiratory symptoms may be delayed for several hours after exposure.

Hazards
May be harmful if swallowed and enters airways.
May be harmful if swallowed.
Harmful if inhaled.
May cause respiratory irritation.
May cause drowsiness or dizziness.

Treatment
Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5 – Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

SMALL FIRE: Use dry chemicals, CO_2, water spray or alcohol-resistant foam. LARGE FIRE: Use water spray, water fog or alcohol-resistant foam.

Unsuitable extinguishing media:

Do not use solid water stream - may spread fire.

5.2 Special hazards arising from the substance or mixture

Releases flammable vapours below normal ambient temperatures.
When mixed with air and exposed to ignition source, vapours can burn in open or explode if confined.
Flammable vapours may be heavier than air and travel long distances along the ground before igniting and flashing back to vapor source.
Move containers from fire area if it can be done without risk.
Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
Cool containers with flooding quantities of water until well after fire is out.

Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
Always stay away from tanks engulfed in fire.
For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

5.3 Advice for fire-fighters

Wear positive pressure self-contained breathing apparatus (SCBA).
Structural firefighter's protective clothing will only provide limited protection.

5.4 Further information

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

5.5 Hazchem Code

3YE

Section 6 - Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.
Ensure adequate ventilation.

6.2 Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Extremely flammable. Eliminate all sources of ignition. All equipment used when handling this product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapours. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. Dike large spills and place materials in salvage containers. Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.4 Additional advice

See section 8 for PPE information.

Section 7 - Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Use only non-sparking tools.
Extinguish all ignition sources.
Carefully vent any internal pressure before removing closure.
Containers must be properly grounded before beginning transfer.
Handle empty containers with care; vapor/residue may be flammable.
All equipment must conform to applicable electrical code.
This material may attack some forms of plastics, rubbers, and coatings.
Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair.
Check atmosphere for explosiveness and oxygen deficiencies.
Wear recommended personal protective equipment.
Observe precautions pertaining to confined space entry.
Do not breathe vapours or spray mist.

Advice on protection against fire and explosion

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Take precautionary measures against static discharge.

Fire-fighting class

Highly flammable liquid.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store closed drums with bung in up position.
Store only in tightly closed, properly vented containers away from heat, sparks, open flame and strong oxidizing agents.
Containers must be properly grounded before beginning transfer.
This material may attack some forms of plastics, rubbers, and coatings.
Consult supplier(s) of these materials for specific recommendations.
Steel drums are recommended for packaging.

7.3 Specific end use(s)

See Section 1.

Section 8 - Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

Occupational exposure limit values (WELs)

Substance	ppm	mg.m³	ppm	mg.m³
Tert-Butyl acetate	200	950		
Tert-Butyl alcohol	100	300		

USA OSHA Permissible Exposure Limits (PELs) Table Z-1, April 2024. 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 workingday 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.

Consult local authorities for acceptable exposure limits.

8.2 Exposure controls

Engineering measures

Both local exhaust and good general room ventilation must be provided not only to control exposure but also to prevent formation of flammable mixtures.

Personal protective equipment

Respiratory protection

If exposure can potentially exceed the exposure limit(s), respiratory protection recommended or approved by appropriate local, state or international agency must be used.

Hand protection

Wear chemical resistant gloves such as:

Butyl rubber.

Eye/face protection

Use splash goggles when eye contact due to splashing or spraying liquid is possible.

Skin and body protection

Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn.

The equipment must be cleaned thoroughly after each use.

Hygiene measures

Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment

relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use.
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities.
Wash clothing frequently.

Section 9 – Physical and chemical properties

Appearance	liquid
Colour	clear, colourless
Odour	camphor-like-odor
Odour threshold	8 ppb
Flash point	4 °C at 1,013.0 hPa (759.8 mm Hg)
Ignition temperature	589 °C at 1,013 hPa
Lower explosion limit	= 1.26 vol %
Upper explosion limit	= 6.88 vol %
Flammability (solid, gas)	Not applicable
Oxidizing properties	Not considered an oxidizing agent
Auto-ignition temperature	589 °C at 1,013 hPa
Molecular weight	116.16 g/mol
Decomposition temperature	not determined
pH	6 - 7
Melting point /freezing point	-58.15 °C at 1,013 hPa
Boiling point and boiling range	97.8 °C at 1,013 hPa
Flash point	16.6 °C – 22.2 °C
Vapour pressure	55.995 hPa at 20 °C
Density	0.86 g/cm3 at 25 °C
Water solubility	7,820 mg/L at 23 °C
Partition coefficient (n-octanol/water)	1.64 (Log Pow) at 21.7 °C
Viscosity, dynamic	< 1 mPa.s at 25 °C
Viscosity, kinematic	< 1 mm²/s
Relative vapour density	No data available
Evaporation rate	2.8 (butyl acetate = 1)
Explosive properties	Not explosive
Other information	Additional properties may be listed in Sections 2 and 5

Section 10 – Stability and reactivity

10.1 Reactivity
Will not occur.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Not expected to occur.

10.4 Conditions to avoid
Heat, sparks, open flame, other ignition sources, and oxidizing conditions.

10.5 Material to avoid
Some plastics.
Acids.
Alkalies.
Nitrates.
Strong oxidizing agents.

10.6 Hazardous decomposition products
Under hot, acidic conditions, the decomposition products are isobutylene and acetic acid.

Thermal decomposition	Carbon oxides (CO, CO2), Water.

Section 11 – Toxicological information
Product Summary
The below given information is based on the assessment of the product including impurities.

Acute toxicity

Acute oral toxicity	Based on acute toxicity values, not classified. May be harmful if swallowed. High doses may cause CNS depression (fatigue, dizziness and possibly loss of concentration, with collapse, coma and death in cases of severe over-exposure). LD50 Oral: 4,500 mg/kg

Acute inhalation toxicity	Classified Harmful if inhaled. High vapor concentrations may cause CNS stimulation (increased activity, shaking, tremors) and/or depression (fatigue, dizziness, and possibly loss of concentration, with collapse, coma and death in cases of severe over-exposure). LC50: 12.52 mg/l Exposure time: 4 HOURS Method: Calculation method
Acute dermal toxicity	Based on acute toxicity values, not classified. LD50 Dermal: > 2,000 mg/kg
Skin corrosion/irritation	Based on skin irritation values, not classified. May cause slight transient skin irritation. Repeated exposure may cause skin dryness or cracking.
Serious eye damage/eye irritation	Based on eye irritation values, not classified. Moderate eye irritation
Respiratory or skin sensitization	Respiratory sensitization Not classified No study available. Skin sensitization Not classified No adverse effect observed
Chronic toxicity	
Carcinogenicity	Not classified No adverse effect observed
Germ cell mutagenicity	Not classified No adverse effect observed.
Reproductive toxicity	
Effects on fertility / Effects on or via lactation	Not classified Effects on or via lactation No adverse effect observed

Effects on Development	Not classified No adverse effect observed
Target Organ Systemic Toxicant - Single exposure	Classified, may cause respiratory irritation. May cause drowsiness or dizziness. Exposure routes: Inhalation, Ingestion Target Organs: Central nervous system, Respiratory system
Target Organ Systemic Toxicant - Repeated exposure	Based on repeated exposure toxicity values, not classified.
Aspiration hazard	Not classified May be harmful if swallowed and enters airways.

Section 12 – Ecological information

Environmental Assessment

Short-term (acute) aquatic hazard	Harmful to aquatic life.
Long-term (chronic) aquatic hazard	Not classified, based on readily biodegradability and low acute toxicity.
Toxicity to fish	Low acute toxicity to fish
Toxicity to daphnia and other aquatic invertebrates	Low acute toxicity to aquatic invertebrates.
Toxicity to algae	Harmful to algae. Can inhibit growth of aquatic algae EC50: 16 mg/l Exposure time: 72 HOURS Species: Pseudokirchneriella subcapitata (green algae) Test type: Growth inhibition EC50: 64 mg/l Exposure time: 96 HOURS NOEC: 2.3 mg/l

Toxicity to bacteria	High concentrations may be harmful to sewage treatment plant microbes 1.5 mg/l Species: Activated sludge Test type: Respiration inhibition
Toxicity to fish (Chronic toxicity)	no data available
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	no data available
Persistence and degradability **Biodegradability**	Biodegradation: 50 % Inherently biodegradable. (After 28 days in a ready biodegradability test)
Stability in water tert-butyl acetate tert-butyl alcohol	Hydrolyzes slowly. Hydrolytically stable.
Stability in soil **tert-butyl acetate** **tert-butyl alcohol** **2,4,4-trimethylpent-1-ene**	Low potential for soil adsorption expected Low potential for soil adsorption expected Expected to have moderate mobility in soils. Volatilization from moist soil surfaces is expected to be an important fate process of this material. The potential for volatilization from dry soil surfaces may exist. Not likely to adsorb to suspended solids and sediment in water.
Bioaccumulative potential **Bioaccumulation**	Bioconcentration factor (BCF): 6.7 This material is not expected to bioaccumulate.
Mobility in soil	

Distribution among environmental compartments **tert-butyl acetate**	Released material would be expected to show high soil mobility and to volatilize readily from soil and surface waters, forming atmospheric vapor.
Other adverse effects **Environmental fate and pathways**	No additional information available.
Other information **Additional ecological information**	No additional information available.

Section 13 – Disposal considerations

13.1 Waste treatment methods

Product

Contaminated product, soil, water, container residues and spill clean up materials may be hazardous wastes.

Comply with applicable federal, state, and local regulations.

Section 14 – Transport information

ADG

UN number Description of the goods Class Packing group Labels Hazchem Code	1123 BUTYL ACETATES 3 II 3 3YE
IMDG UN number Description of the goods Class Packing group Labels EmS Number 1 EmS Number 2 Marine pollutant	 1123 BUTYL ACETATES 3 II 3 F-E S-D No

BLG (MARPOL Annex II) Description of the goods Pollution category Ship type	 BUTYL ACETATE (ALL ISOMERS) Y 3
IATA UN number Description of the goods Class Packing group Labels	 1123 BUTYL ACETATES (Tert-Butyl acetate) 3 II 3

Section 15 – Regulatory information

Other international regulations
Global Inventory Status
The ingredients of this product are compliant with the following chemical inventory requirements or exemptions.

*Additional Explanatory Status Statements follow the table, as necessary.

Country/Region	Inventory	Status Description
Australia	AICS	Compliant
Canada	DSL	Compliant
China	IECSC	Compliant
Europe	REACh	See REACH Compliance Statement
Japan	ENCS	Compliant
Korea	KECI	Compliant
New Zealand	NZIoC	Compliant
Philippines	PICCS	Compliant
USA	TSCA	Compliant
Taiwan	TCSCA	Compliant

Section 16 – Other information

Product
The information provided in this document is based on our knowledge at the date of its publication. The properties of the product described do not constitute a warranty in the legal sense of the term. The provision of this document does not release the purchaser of the product from his responsibility to comply with legislations and regulations in force for this product. This statement applies for the resale and distribution of the product, or of substances or goods containing this

product, in other jurisdictions and having regard to the industrial and commercial property rights of third parties. If the product described is transformed or mixed with other substances or materials, the information contained in this document may not be valid for the new product thus manufactured, unless explicitly mentioned. In case of repackaging of the product, the customer is required to provide the required safety information.

Legend

CAS	Chemical Abstracts Service
ppm	part per million
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
EC50	Effective Concentration 50%
vPvB	very Persistent and very Bioaccumulative
WEL	Workplace Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic
DNEL	Derived No-Effect Level
PNEC	Predicted No-Effect Concentration
REACh	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemical
CLP	Regulation on Classification, Labelling and Packaging of substances and mixtures
ADR/RID	European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association

Flam. Liq. Flammable liquid
Acute Tox. Acute toxicity

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