



# Lightspeed

## Safety Data Sheet

### Section 1

### Identification of the material and the supplier

Product: Lightspeed

Product Code: LSPD15

Product Use: Light Coating

Supplier: Oceanmax International Ltd  
PO Box 83 232  
Edmonton  
Auckland 0652 New Zealand  
www.oceanmax.com  
Telephone: +64 27 200 4228  
Fax: +64 9 813 5246

Emergency Response Telephone:  
(24 hours, 365 days) New Zealand Only 0800 243 622  
Australian Only 1800 127 406  
Global Access +64 4 917 9888

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:** Surface Coatings and Colourants (Flammable) – HSR002662

**GHS Classification:** Flammable Liquid and Vapour, Cat 3  
Harmful if inhaled, Cat 5  
Serious eye irritation, Cat 1  
Skin irritation, Cat 1  
Respiratory irritation, Cat 2  
Toxic to reproduction (unborn child), Cat 2  
May cause long lasting harmful effects to aquatic life, Cat 4  
Harmful to terrestrial vertebrates, Cat 3

**GHS Pictograms:****GHS Signal Word:**

All chemicals present in this pro  
TSCS List

WARNING

<b>HSNO Classification</b>	<b>Hazard Code</b>	<b>Hazard Statement</b>
3.1C	H226	Flammable liquid and vapour.
6.1E Inhalation – vapours, dusts or mists	H333	May be harmful if inhaled.
6.3A	H315	Causes skin irritation.
6.4A	H319	Causes serious eye irritation.
6.8B	H361	Suspected of damaging fertility or the unborn child.
9.1D	H413	May cause long lasting harmful effects to aquatic life.
9.3C	H433	Harmful to terrestrial vertebrates.

<b>Prevention Code</b>	<b>Prevention Statement</b>
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilation/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective clothing and protective equipment

<b>Response Code</b>	<b>Response Statement</b>
P370 + P378	In case of fire: Use foam, carbon dioxide or dry chemical powder for extinction.
P303 +P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P101	If medical advice is needed, have product container or label at hand.
P304 + P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before re-use.
P305 +P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P308 + P313	If exposed or concerned: Get medical advice/ attention.
<b>Storage Code</b>	<b>Storage Statement</b>
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
<b>Disposal Code Disposal Statement</b>	
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.

<b>Section 3</b>	<b>Composition/ Information on Hazardous Ingredients</b>	
<b>Ingredients</b>	<b>Wt%</b>	<b>CAS NUMBER.</b>
Trimethoxy(methyl)silane	1-5	1185-55-3
Methanol	0.1-2	67-56-1
Diisopropoxytitanium bis (ethylacetoacetate)	0.1-2	27858-32-8
Methoxy and aminofunctional silane	0.1-2	
Xylene	10-30	1330-20-7
Trimethylated silica	1-5	727-697-1
Non-hazardous ingredients	To balance	

<b>Section 4</b>	<b>First Aid Measures</b>
If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if needed.
If on Skin	Wash with soap and water. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if needed.
If Swallowed	Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately.

If Inhaled

Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if needed.

Section 5	Fire Fighting Measures
Hazard Type	Flammable liquid
Hazards from decomposition products	Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Hydrogen, nitrogen products.
Suitable Extinguishing media	On large fires use AFFF alcohol compatible foam or water spray (fog). On small fires use AFFF alcohol compatible foam, CO <sub>2</sub> or water spray (fog). Water can be used to cool fire exposed containers. Most fire extinguishing media will cause hydrogen release. Thus, in poorly ventilated or confined spaces, the accumulation of hydrogen may result in flash fire or explosion if ignited. Applying foam may release flammable hydrogen gas that can be trapped under the foam. Unsuitable: Dry powder. Do not allow extinguishing medium to contact container contents
Precautions for firefighters and special protective clothing	A self-contained respirator and protective clothing should be worn. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool. Vapours may form explosive mixtures with air.
HAZCHEM CODE	3Y

## Section 6 Accidental Release Measures

Wear protective PVC gloves, chemical goggles and PVC boots. Contain spill with earth and sand. Where practical, transfer spilt material to clean polyethylene containers for disposal. Transfer contaminated earth or sand into polyethylene containers for disposal. Neutralise residual acid with soda ash or lime. Wash down area with excess water. Do not allow to drain or watercourse. Dispose of solid residues in chemical waste disposal area in accordance with relevant Local Council requirements. Use licensed trade waste contractor to dispose of all chemical residues.

## Section 7 Handling and Storage

### Precautions for safe handling:

- Ventilation is recommended.
- Keep out of reach of children.
- Read label before use.
- Read safety data sheet before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat, sparks, open flames and hot surfaces. No smoking.
- Keep container tightly closed.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid breathing fumes and vapours or sprays.
- Wash hands thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective clothing and protective equipment.

### Conditions for safe storage:

- Store in a flameproof, well-ventilated area.
- Electrostatic charges may be generated during transfer of product from its container.

- Ensure that all equipment is electrically earthed.
- Keep container closed and store away from water or moisture.
- This product may evolve hydrogen on storage.
- Vapours may form explosive mixtures with air.
- Do not store with oxidizing agents.
- Store locked up.

**Section 8 Exposure Controls/ Personal Protection**  
**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	CAS #	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Trimethylated Silica	68909-20-6	respirable dust	5mg/m <sup>3</sup>		
		inhalable dust	10mg/m <sup>3</sup>		
Trimethoxy (methyl) silane	1185-55-3	220ppm		250ppm as methanol	
Methanol	67-56-1	220ppm	266mg/m <sup>3</sup>	250ppm	333mg/m <sup>3</sup>
Xylene	1330-20-7	100ppm	662mg/m <sup>3</sup>	150ppm	441mg/m <sup>3</sup>

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.

**Engineering Controls:** Ventilation is recommended.

**Personal Protective Equipment:**

**Respiratory:** Suitable respiratory protection should be worn in confined spaces or in case of inadequate ventilation. A suitable respirator must be worn if during use an aerosol or mist is generated.

**Hand Protection:** Wear protective gloves. Nitrile gloves are recommended.

**Eye Protection:** Tight fitting safety goggles or face shield should be used.

**Skin Protection:** Wear impervious overalls if significant skin contact is likely to occur.

**Hygiene Measures:** Exercise proper industrial hygiene practices. Wash after handling, especially before eating, smoking or drinking. Contaminated clothing should be immediately removed.

**General:** These precautions are for handling the product in normal conditions and application techniques. This product must not be sprayed during application.

**Section 9****Physical and Chemical Properties**

Appearance:	Translucent Liquid
Odour:	Solvent
Odour Threshold: pH (at 20°C):	Data not available
Melting Point/Freezing Point (°C):	Data not available
Initial Boiling Point & Boiling Range (°C):	135 - 145
Flash Point (°C):	23
Flammability (solid, gas):	Data not available
Explosive Limits:	1.1 - 7 vol%
Vapour Pressure (Pa):	1335
Vapour Density:	Data not available
Relative Vapour Density (air = 1):	1
Solubility(ies):	Insoluble in water, soluble in organic solvents
Partition Co efficient n-octanol/water:	Data not available
Auto-ignition Temperature:	Data not available
Decomposition Temperature:	Data not available
Kinetic Viscosity:	Data not available
Particle Characteristics:	Data not available

**Section 10****Stability and Reactivity**

<b>Chemical Stability</b>	Stable under normal usage conditions.
<b>Conditions to Avoid</b>	Avoid heat, flames and other sources of ignition.
<b>Incompatibility</b>	Hydrogen is liberated on contact with water, alcohols, acidic or basic materials, many metals or
<b>Hazardous Decomposition Products</b>	Metallic compounds and can form explosive mixtures in the air. Can react with strong oxidizing agents. Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Silica. Carbon oxides and traces of incompletely burned carbon compounds. Formaldehyde. Hydrogen, nitrogen products.

## Section 11 Toxicological Information

### Acute Oral Toxicity:

Methanol = LD50(Human) = 300mg/kg  
Methoxy and aminofunctional Silane = LD50 (mouse) = 1590mg/kg

**Acute Dermal Toxicity:**  
Methanol = LD50 (Human) = 1000mg/kg

**Acute Dermal Toxicity:**  
Methanol = LC50(Human) = 10mg/L (4 hrs)  
Methoxy and aminofunctional Silane = LC50 (Rat) = 27.6mg/L

### Chronic Effects:

**Inhalation:** Harmful by inhalation of vapour. May cause dizziness, drowsiness, confusion, headaches, nausea, and at high concentrations unconsciousness.

**Skin Contact:** Irritating. Harmful in contact with skin. May produce an allergic reaction. Repeated or prolonged contact may cause defatting of the skin leading to dermatitis.

**Eye Contact:** May cause temporary discomfort.

**Ingestion:** Small amounts transferred to the mouth by fingers during use should not injure. Swallowing large amounts may cause digestive discomfort. Forms methanol and may cause serious injury to man at doses > 200mg/kg. Special Effects: This product contains powder hazardous by inhalation. This is not relevant to the current physical form of the product, which is not a respirable form. Product may emit formaldehyde vapour at temperatures above 180°C in the presence of air. Formaldehyde vapour is a suspected carcinogen, toxic by inhalation and irritating to eyes and the respiratory system. Exposure limits should be strictly respected.

## Section 12 Ecotoxicological Information

**HSNO Classifications:** 9.1D = Harmful to aquatic life.  
**Environmental Precautions:** 9.3C = Harmful to terrestrial vertebrates.

**Mobility:** Siloxanes are removed from water by sedimentation or binding to sewage sludge. In soil, siloxanes are degraded. This product hydrolyses in water or moist air, releasing methanol and organosilicons. This product contains volatile substances which may spread in the atmosphere.

**Degradability:** Silicone content, biologically not degradable.

**Bioaccumulative:** No bioaccumulation predicted

## Section 13 Disposal Considerations

Triple rinse and dispose of in accordance with Local Regulations.  
Ensure waste container is labelled "Hazardous Waste – Flammable"  
This substance is classified as a dangerous good according to NZS5433: 2007

UN No 1263  
 Proper Shipping Name PAINT  
 Class 3  
 Packing Group III  
 Hazchem 3Y  
 Marine Pollutant No



## Section 14 Regulatory Information

Group Standard: **HSR002662 – Surface Coatings and Colourants Flammable**

HSNO Classification: 3.1C, 6.1E, 6.3A, 6.4A, 6.8B, 6.9B, 9.1D, 9.3C

HSNO Controls: Level 2: SDS required when any quantity is present in a workplace.  
 Fire Extinguishers: At least 2 x 4.5kg extinguishers required when >500L is stored.  
 Hazardous Atmosphere Zone required for >100L (closed containers), 25L (decanting), 5L (open occasionally), 1L (open continuously).

Level 3: Emergency Response Plan and Secondary Containment required when >10,000L is present in a workplace.  
 Flammable signage required when >10,000L is stored.  
 Ecotoxic signage required when >10,000L is stored.

Trigger quantities for this substance:

	Trigger Quantity
Approved Handler	Not required
Location Certificate	Location and transit depot test certification required for quantities greater than: 500L (closed containers >5L), 1500L (closed containers up to 5L, 250L (open container)
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	>1000L (flammable), >10,000L (ecotoxic)
Emergency Response Plan trigger Quantities	10 000L

## Section 15 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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