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MATERIAL SAFETY DATA SHEET - LINQSIL™

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : LINQSIL ™

SUPPLIER NAME: CAPLINQ Europe B.V. CAPLINQ Corporation

Provincialeweg 1 957 Snowshoe Crescent 1561KK Krommenie Ottawa, ON K1C 2Y3

The Netherlands Canada

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MSDS NUMBER : Linqsil ™

CHEMICAL NAME: SILICONE BASED Mold Release Agent

CAS NUMBER : Not applicable

TRADENAME: LINQSIL SILICONE-BASED Mold Release Agent CAPLINQ PRODUCT ID: LINQSIL S-100, LINQSIL S-200, LINQSIL S-300

2. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

A. SUBSTANCES WHICH GIVE THE PRODUCT ITS HEALTH-RISK PROPERTIES:

According to the European Directive 75/324/EEC, this product is a High Flammable Aerosol.

Composition and characterization of the product: Polydimethylsiloxane in a compressed gas mixture

B. DANGEROUS COMPONENTS

INGREDIENT	CAS #	EINECS:	Comment	WEIGHT %
Butane	106-97-8	203-448-7	F+ R12	50-<60%
Propane	74-98-6	200-827-9	F+ R12	20-<30%

3. HAZARD IDENTIFICATION

This product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

RISK PHRASES:

12 Extremely flammable.

SAFETY PHRASES:

- 2 Keep out of the reach of children.
- 16 Keep away from sources of ignition No smoking.
- 23 Do not breathe vapour/spray.
- 24 Avoid contact with skin.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

SPECIAL LABELLING OF CERTAINN PREPARATIONS:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Buildup of explosive mixtures possible without sufficient ventilation.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

None

4. FIRST AID MEASURES

EMERGENCY AND FIRST AID PROCEDURES:

EYES:

Rinse opened eye with water for 15 minutes. If irritation persists, contact a physician.

SKIN:

Wash with water and soap, if irritation persists consult a doctor.

INHALATION:

Supply fresh air; consult doctor in case of complaints.

INGESTION:

Do not induce vomiting; Call for medical help immediately

NOTES TO PHYSICIAN:

Treat based on symptoms

5. FIRE FIGHTING MEASURES

FIRE

The flammability characteristic of Linqsil is reported as "highly flammable" Linqsil is packed in a pressurized container and has risks to catch flame at temperatures higher than 50 C °in air or stored in direct sunlight.

SUITABLE EXTINGUISHING MEDIA

Fire-extinguishing powder, Carbon dioxide, Alcohol resistant foam, Sand for small fires

SPECIAL FIRE FIGHTING PROCEDURES:

For safety reasons unsuitable extinguishing agents: Water with full jet

Protective equipment: Mount respiratory protective device.

Additional: Use extinguishing measures that environment fire, cool exposed containers with water. Dispose of contaminated extinguishing water in accordance with official regulations.

Special hazards rising from substance or preparation itself, its combustion products or from resulting gases:

Carbon Monoxide (CO)
Carbon Dioxide (CO2)

6. ACCIDENTAL RELEASE MEASURES

. 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation and use non-flammable cleaning products.

· 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.

7. HANDLING AND STORAGE

HANDLING:

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care

STORAGE:

Should be kept in a cool ($10^{\circ}\text{C} - 25^{\circ}\text{C}$) dry place (40% - 75% humidity) away from direct sunlight or temperature extremes. Keep away from heat, sparks and open flames.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

· 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: (TRGS 900)

106-97-8 butane value: 2400 mg/m³, 1000 ml/ m³, cat 4> **74-98-6 propane** value: 1800 mg/m³, 1000 ml/ m³, cat 4>

· Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device.

In case of intensive or longer exposure use self-contained respiratory protective device.

Use suitable respiratory protective device in case of insufficient ventilation.

Filter AX/P2

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Protective gloves

Solvent resistant gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber, NBR

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.



Eye protection:

Tightly sealed goggles

Body protection:

Use protective suit.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

-Form: Aerosol

-Colour: According to product specification

Odour: Characteristic
Odour threshold: Not determined.
PH-value: Not determined.

Change in condition:

-Melting point/Melting range: <-20°C -Boiling point/Boiling range: <-20°C

Flash point: Not Determined

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 235 °C

Decomposition temperature: Not determined.

Self-igniting: Product is not self-igniting.

Danger of explosion: Product is not explosive. However, formation of explosive air/

vapour mixtures are possible.

Explosion limits:

-Lower: 1.5 Vol %
-Upper: 10.5 Vol %
Vapour pressure at 20 °C: 3.5 Bar
Density at 20 °C: 0.6 g/cm³

Relative densityNot determined.Vapour densityNot determined.Evaporation rateNot applicable.

Solubility in / Miscibility with water:Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): Not determined.

9.2 Other information:No further relevant information available.

10. STABILITY AND REACTIVITY

STABILITY:

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

INCOMPATIBILITY (MATERIALS TO AVOID):

None reasonably expected

HAZARDOUS DECOMPOSITION PRODUCTS:

No dangerous decomposition products known.

HAZARDOUS POLYMERIZATION:

Will not occur

CONDITIONS TO AVOID:

Open flame, heat spark and any other sources of ignition

11. TOXICOLOGICAL INFORMATION

SKIN IRRITATION + EYE IRRITATION:

No chance of irritation

ACCUTE TOXICITY:

No further relevant information available.

CARCINOGEN STATUS:

12. ECOLOGICAL INFORMATION

Aquatic Toxicity:

No further relevant information available.

Persistence and degradability Easily biodegradable

Bio accumulative potentialMobility in soil
Additional ecological information
No further relevant information available.
No further relevant information available.

Other adverse effects No further relevant information available.

13. DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

14. TRANSPORT INFORMATION

UN NUMBER:

- ADR, IMDG, IATA UN1950

UN proper shipping name

- ADR 1950 AEROSOLS - IMDG AEROSOLS

- IATA AEROSOLS, Flammable

Transport Hazard class(es)

- ADR

o Class 2 5F Gases.

o Label 2.1

- IMDG, IATA

ClassLabel2.1

Packaging group

- ADR, IMDG, IATA -

Special Precautions for user Warning: Gases

- EMS Number F-D, S-U

Additional Information

- ADR

Limited quantities 1 L
 Transport category 2
 Tunnel restriction code D

UN "Model regulation" UN1950, AEROSOLS, 2.1

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

- Technical instructions (air):

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

R12 Extremely flammable.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

Department issuing MSDS: Research & Development

Contact: Christopher A. Perabo **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

(Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement

concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards,

Denmark)

MSDS Revision Date: 20 July 2014