according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 11.15.2015

Trade Name: LHC623 Heat Conductive Sealant/Retainer

1 Identification of the substance/mixture and of the supplier

1.1 Product identifier

Trade Name: LHC623 Heat Conductive Sealant/Retainer

Synonyms:

Product number: LHC623

1.2 Application of the substance / the mixture : Sealant

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer

Lock-n-Stitch Inc. 1015 S. Soderquist Road Turlock, CA 95380 209-632-2345

Emergency telephone number:

ChemTel

800-255-3924 1-813-248-0585

2 Hazards identification

2.1 Classification of the substance or mixture:

In compliance with EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments.

Hazard-determining components of labeling:

Dibutyl phthalate

 α, α -dimethylbenzyl hydroperoxide

2.2 Label elements:

Skin sensitization, category 1.

Serious eye damage, category 1.

Skin irritation, category 2.

Specific target organ toxicity - single exposure, category 2.

Acute aquatic hazard, category 1.

Reproductive toxicity, category 2.

Specific target organ toxicity - repeated exposure, category 2.

Acute toxicity (inhalation), category 4.

Chronic aquatic hazard, category 3.

Hazard pictograms:









Signal word: Danger Hazard statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H361 Suspected of damaging fertility or the unborn child.

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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H371 May cause damage to organs.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with soap and water.

P304+P340+P312 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P309+P311 If exposed or you feel unwell: Call a poison center or doctor/physician.

P321 Specific treatment (see supplemental first aid instructions on this label).

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents and container as instructed in Section 13.

Additional information: None.

Hazard description

Hazards Not Otherwise Classified (HNOC): None

Information concerning particular hazards for humans and environment:

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

Classification system:

The classification is according to EC regulation No. 1272/2008, 29CFR1910/1200 and GHS Rev. 3 and amendments, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

3 Composition/information on ingredients

3.1 Chemical characterization : Mixture.

3.2 Description: None

3.3 Hazardous components (percentages by weight)

Identification	Chemical Name	Classification	Wt. %
CAS number: 136505-03-8	Poly(oxy-1,2-ethanediyl), .alpha(2-methyl-1-oxo-2-propenyl)omegahydroxy-, C12-alkyl ether	Skin Sens. 1; H317 Skin Irrit. 2 ; H315 Stot SE 2; H371	>50

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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CAS number: 84-74-2	Dibutyl phthalate	Repr. 1B; H360 Aquatic Acute 1; H400	25-50
CAS number: 25322-68-3	Polyethylene glycol		<10
CAS number: 80-15-9	α,α -dimethylbenzyl hydroperoxide	Acute Tox. 4; H303 Acute Tox. 4; H313 Acute Tox. 3; H332 Skin Corr. 1B; H314 Stot RE 2; H373 Aquatic Chronic 2; H411	<10
CAS number: 613-48-9	N,N-diethyl-p-toluidine	Acute Tox. 4; H303 Skin Irrit. 2 ; H315 Eye Irrit. 2; H319	<2.5

3.4 Additional Information : None.

4 First aid measures

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

After inhalation:

Maintain an unobstructed airway.

Loosen clothing as necessary and position individual in a comfortable position.

Provide oxygen treatment if affected person has difficulty breathing.

In case of irregular breathing or respiratory arrest provide artificial respiration.

After skin contact:

If symptoms develop or persist, seek medical attention.

Rinse affected area with soap and water.

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes.

If symptoms develop or persist, seek medical attention.

Remove contact lenses if worn.

After swallowing:

Seek medical attention if irritation, discomfort, or vomiting persists.

Rinse mouth thoroughly.

Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Strong irritant with the danger of severe eye injury.

Breathing difficulty.

Dizziness.

Coughing.

Gastric or intestinal disorders.

Irritant to skin and mucous membranes.

4.3 Indication of any immediate medical attention and special treatment needed:

No additional information.

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 11.15.2015

Trade Name: LHC623 Heat Conductive Sealant/Retainer

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

For safety reasons unsuitable extinguishing agents: None

5.2 Special hazards arising from the substance or mixture :

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

Protective equipment:

Refer to Section 8.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

5.4 Additional information:

Avoid contact with skin, eyes and clothing.

Avoid inhaling gases, fumes, dust, mist and vapor.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure air handling systems are operational.

Ensure adequate ventilation.

6.2 Environmental precautions:

Prevent from reaching drains, sewer or waterway.

Should not be released into the environment.

6.3 Methods and material for containment and cleaning up :

Wear protective eye wear, gloves and clothing.

Absorb liquid spill with vermiculite or other inert material.

Always obey local regulations.

6.4 Reference to other sections: None

7 Handling and storage

7.1 Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.

Do not taste or swallow.

7.2 Conditions for safe storage, including any incompatibilities :

Store in a cool, well-ventilated area.

Store away from incompatible materials.

Keep container tightly sealed.

7.3 Specific end use(s):

No additional information.

8 Exposure controls/personal protection

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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Trade Name: LHC623 Heat Conductive Sealant/Retainer







8.1 Control parameters :

84-74-2, Dibutyl phthalate, NIOSH IDLH: 4000 mg/m3.

84-74-2, Dibutyl phthalate, OSHA PEL TWA: 5 mg/m3.

25322-68-3, Polyethylene glycol, WEEL TWA 10.0 mg/m3.

80-15-9, α , α -dimethylbenzyl hydroperoxide, Workplace Environmental Exposure Level (WEEL): 8-hr Time-weighted Average (TWA) 1 ppm, skin.

8.2 Exposure controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Protection of skin:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Eye protection:

Safety glasses or goggles are appropriate eye protection.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

9 Physical and chemical properties

Appearance (physical state, color):	White liquid		0.1 % 2.0 %
Odor:	Mild	Vapor pressure at 20°C:	Not determined or not available.
Odor threshold:	Not determined or not available.	Vapor density:	Not determined or not available.
pH-value:	Not determined or not available.	Relative density:	Not determined or not available.
Melting/Freezing point:	Not determined or not available.	Solubilities:	Not miscible or difficult to mix.
Boiling point/Boiling range:	300 °F / > 149 °C	Partition coefficient (noctanol/water):	Not determined or not available.
Flash point (closed cup):	>200 °F/>94 °C	Auto/Self-ignition temperature:	734 °F / 390 °C
Evaporation rate:	Not determined or not available.	Decomposition temperature:	Not determined or not available.

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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Trade Name:	LHC623 Heat	Conductive	Sealant/Retainer

, , ,	Not determined or not available.	Viscosity:	a. Kinematic: Not determined or not available. b. Dynamic: Not determined or not available.
Density at 20°C: 1.1 g/cm³ @ 23.8°C			

10 Stability and reactivity

10.1 Reactivity:

None under normal conditions of use and storage.

10.2 Chemical stability:

Stable under normal conditions of use.

10.3 Possibility hazardous reactions :

Reacts with strong acids and oxidizing agents.

Reacts with various metals.

10.4 Conditions to avoid:

Incompatible materials.

Excessive heat.

10.5 Incompatible materials:

Strong acids, bases, and oxidizing agents.

10.6 Hazardous decomposition products :

Thermal decomposition can release Hydrogen fluoride, Carbon monoxide, Carbon Dioxide, and Nitrogen oxides (NOx).

11 Toxicological information

11.1 Information on toxicological effects:

Acute Toxicity:

Oral:

Polyethylene glycol: LD50: Rat - > 5,000 mg/kg .

Dibutyl phthalate: LD50 Mouse oral 5289 mg/kg. .

 α, α -dimethylbenzyl hydroperoxide: LDLo Mouse oral 5,000 mg/kg. .

Dermal:

Polyethylene glycol: LD50: Rabbit - > 5,000 mg/kg . Dibutyl phthalate: LD50 Rabbit dermal 20 ml/kg. .

Inhalation:

Dibutyl phthalate: LC50 Mouse inhalation 25 g/cu m/2 hr.

 α, α -dimethylbenzyl hydroperoxide: LC50 Mouse inhalation 200 ppm/4 hr. .

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

 α,α -dimethylbenzyl hydroperoxide: This peroxide causes burning and throbbing when in contact with the skin. .

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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Trade Name: LHC623 Heat Conductive Sealant/Retainer

Serious eye damage/irritation: No additional information.

Respiratory or skin sensitization:

 α,α -dimethylbenzyl hydroperoxide: Known skin sensitizer.

Carcinogenicity: No additional information.

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

NTP (National Toxicology Program): None of the ingredients are listed.

Germ cell mutagenicity:

Polyethylene glycol: Ames test S. Typhimurium negative.

Reproductive toxicity: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information: No additional information.

12 Ecological information

12.1 Toxicity:

Dibutyl phthalate: Aquatic Plants, LC50: 210 ug/L for 96 hr.

Dibutyl phthalate: Fish, LC50 - Pimephales promelas (fathead minnow) - 0.85 mg/l - 96.0 h.

Polyethylene glycol: Fish, Leuciscus idus (Golden orfe) - > 500 mg/l - 96 h.

- **12.2** Persistence and degradability: No additional information.
- **12.3 Bioaccumulative potential:** No additional information.
- **12.4 Mobility in soil:** No additional information.

General notes: No additional information.

12.5 Results of PBT and vPvB assessment:

PBT: No additional information. **vPvB:** No additional information.

12.6 Other adverse effects: No additional information.

13 Disposal considerations

13.1 Waste treatment methods (consult local, regional and national authorities for proper disposal) Relevant Information:

(US 40CFR262.11). It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities.

14 Transport information

14.1	UN Number: ADR, ADN, DOT, IMDG, IATA	3082
14.2	UN Proper shipping name: ADR, ADN, DOT, IMDG, IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyl phthalate).
14.3	Transport hazard classes:	

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

Effective date: 11.15.2015

Trade Name: LHC623 Heat Conductive Sealant/Retainer

ADR, ADN, DOT, IMDG, IATA Class: 9

Label: 9 Miscellaneous dangerous substances and articles

LTD. QTY: 5L.

US DOT

Limited Quantity Exception: 5L.

Bulk: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Proper shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Proper shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Dibutyl phthalate). (Dibutyl phthalate). **Hazard Class:** 9 **Hazard Class:** 9

Packing Group: Not regulated. Packing Group: Not regulated.

Marine Pollutant (if applicable): Yes Marine Pollutant (if applicable): Yes

Comments: None Comments: None





14.4 Packing group: Not regulated.

ADR, ADN, DOT, IMDG, IATA

14.5 Environmental hazards: Acute aquatic toxicity.

14.6 Special precautions for user:

Danger code (Kemler):

EMS number:

None

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

None

14.8 Transport/Additional information:

Segregation groups:

Transport category: 3. **Tunnel restriction code:** E.

UN "Model Regulation": 3082, ENVIRONMENTALLY HAZARDOUS

SUBSTANCE, LIQUID, N.O.S. (Dibutyl phthalate),

9, Not regulated, Marine Pollutant

15 Regulatory information

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

North American

SARA

Section 313 (specific toxic chemical listings):

84-74-2 Dibutyl phthalate.

80-15-9 α , α -dimethylbenzyl hydroperoxide.

Section 302 (extremely hazardous substances): None of the ingredients are listed.

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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Trade Name: LHC623 Heat Conductive Sealant/Retainer

CERCLA (Comprehensive Environmental Response, Clean up and Liability Act) Reportable Spill Quantity:

84-74-2 Dibutyl phthalate 10 Lbs.

80-15-9 α , α -dimethylbenzyl hydroperoxide 10 Lbs.

TSCA (Toxic Substances Control Act):

Inventory: All ingredients are listed. **Rules and Orders**: Not applicable.

Proposition 65 (California):

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients are

listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.

Chemicals known to cause developmental toxicity: None of the ingredients are listed.

Canadian

Canadian Domestic Substances List (DSL):

All ingredients are listed.

EU

REACH Article 57 (SVHC): 84-74-2 Dibutyl phthalate.

Germany MAK: Not classified.

Asia Pacific

Australia

Australian Inventory of Chemical Substances (AICS): All ingredients are listed.

China

Inventory of Existing Chemical Substances in China (IECSC): All ingredients are listed.

Japan

Inventory of Existing and New Chemical Substances (ENCS): All ingredients are listed.

Korea

Existing Chemicals List (ECL): All ingredients are listed.

New Zealand

New Zealand Inventory of Chemicals (NZOIC): All ingredients are listed.

Philippines

Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients are listed.

Taiwan

Taiwan Chemical Substance Inventory (TSCI): All ingredients are listed.

16 Other information

Abbreviations and Acronyms:

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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ACGIH American Conference of Governmental Industrial Hygienists.

TSCA Toxic Substances Control Act (USA).

TWA Time-Weighted Average.

WEEL Workplace Environmental Exposure Limit (see AIHA).

vPvBs Very Persistent and Very Bioacccumulative substances.

VOC Volatile Organic Compound.

SNUR Significant New Use Rule (see TSCA).

SARA Superfund Amendments and Reauthorization Act (USA).

N/A Not Applicable.

n.o.s. Not Otherwise Specified.

LD50 Median Lethal Dose.

HMIS Hazardous Materials Identification System (USA).

NFPA National Fire Protection Association (USA).

PBTs Persistent, Bioaccumulative and Toxic substances.

RCRA Resource Conservation and Recovery Act (USA).

PEL Permissible Exposure Limit.

DOT US Department of Transportation.

CAS Chemical Abstracts Service (division of the American Chemical Society).

IATA International Air Transportation Association.

LC50 Median Lethal Concentration.

TLV Threshold Limit Value.

TDG Transportation of Dangerous Goods.

STEL Short-Term Exposure Limit.

Summary of Phrases

Hazard statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H361 Suspected of damaging fertility or the unborn child.

H371 May cause damage to organs.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with soap and water.

P304+P340+P312 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), 29CFR1910/1200 and GHS Rev. 3

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P309+P311 If exposed or you feel unwell: Call a poison center or doctor/physician.

P321 Specific treatment (see supplemental first aid instructions on this label).

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents and container as instructed in Section 13.

Manufacturer Statement:

However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. The information contained herein is, to the best of our knowledge and belief, accurate. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material. The responsibility to provide a safe workplace remains with the user. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

NFPA: 2-1-0

HMIS: 2-1-0