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1 Identification of the substance/mixture and of the company/undertaking
· 1.1 Product identifier
· Trade name: Broad Spectrum Threadlocker
 Article number: 13001 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
· Application of the substance / the mixture Sealant
 • 1.3 Details of the supplier of the Safety Data Sheet • Manufacturer/Supplier: Highside Chemicals, Inc. 11114 Reichold Road Gulfport, MS 39503 USA Phone: (228) 896-9220 • Further information obtainable from: Product Safety Department
• 1.4 Emergency telephone number: ChemTel Inc. (800)255-3924, +1 (813)248-0585
2 Hazards identification
· 2.1 Classification of the substance or mixture · Classification according to Regulation (EC) No 1272/2008
• 2.1 Classification of the substance or mixture • Classification according to Regulation (EC) No 1272/2008 flame
Classification according to Regulation (EC) No 1272/2008
Classification according to Regulation (EC) No 1272/2008 flame Flam. Liq. 2 H225 Highly flammable liquid and vapour. Classification according to Directive 67/548/EEC or Directive 1999/45/EC F; Highly flammable
 Classification according to Regulation (EC) No 1272/2008 flame Flam. Liq. 2 H225 Highly flammable liquid and vapour. Classification according to Directive 67/548/EEC or Directive 1999/45/EC F; Highly flammable R11: Highly flammable. Information concerning particular hazards for human 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 according to Regulation (EC) No 1272/2008 flame Flam. Liq. 2 H225 Highly flammable liquid and vapour. Classification according to Directive 67/548/EEC or Directive 1999/45/EC F; Highly flammable R11: Highly flammable. Information concerning particular hazards for human and environment: The product has to be labelled due to the calculation procedure of the "General Classification guideline
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Trade name: Broad Spectrum Threadlocker (Contd. of page 1) · Hazard pictograms GHS02 · Signal word Danger · Hazard statements H225 Highly flammable liquid and vapour. · Precautionary statements P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P280 Wear protective gloves / eye protection. Keep container tightly closed. P233 P370+P378 In case of fire: Use for extinction: CO2, powder or water spray. P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Hazard description: · WHMIS-symbols: B2 - Flammable liquid • NFPA ratings (scale 0 - 4) Health = 1Fire = 3 Reactivity = 0 · HMIS-ratings (scale 0 - 4) HEALTH 1 Health = 1 FIRE ³ Fire = 3 Reactivity = 0 · HMIS Long Term Health Hazard Substances 64-17-5 ethanol 13463-67-7 titanium dioxide · 2.3 Other hazards · Results of PBT and vPvB assessment · **PBT:** Not applicable. · **vPvB:** Not applicable.

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Dangerous components:		
CAS: 9000-59-3 EINECS: 232-549-9 Index number: 002-325-49-9	Shellac substance with a Community workplace exposure limit	25-50%
CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5	ethanol ▶ F R11 ♦ Flam. Liq. 2, H225	25-50%
CAS: 57-55-6 EINECS: 200-338-0	Propylene Glycol substance with a Community workplace exposure limit	< 10%
CAS: 9004-34-6 EINECS: 232-674-9	Cellulose substance with a Community workplace exposure limit	< 10%
Additional information: For	the wording of the listed risk phrases refer to section 16.	

- General information: No special measures required.
 After inholation: Supply fresh air: consult dotter in cose of comp
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact:
- Clean with water and soap.
- If skin irritation continues, consult a doctor.
- · After eye contact:
- Remove contact lenses if worn.
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing:
- Rinse out mouth and then drink plenty of water.
- Do not induce vomiting; call for medical help immediately.
- 4.2 Most important symptoms and effects, both acute and delayed
- Dizziness
- Coughing
- Breathing difficulty
- Disorientation
- Gastric or intestinal disorders when ingested.
- · Hazards Condition may deteriorate with alcohol consumption.
- 4.3 Indication of any immediate medical attention and special treatment needed
- If necessary oxygen respiration treatment.

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5 Firefighting measures

· 5.1 Extinguishing media

• Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

• For safety reasons unsuitable extinguishing agents: None.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

• 5.3 Advice for firefighters

· Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Use large quantities of foam as it is partially destroyed by the product.

Cool endangered receptacles with water spray.

6 Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

Protect from heat.

• 6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.

• 6.3 Methods and material for containment and cleaning up:

Allow to solidify. Pick up mechanically.

Dispose contaminated material as waste according to item 13.

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

· 7.1 Precautions for safe handling

Prevent formation of aerosols.

Keep away from heat and direct sunlight.

Use only in well ventilated areas.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Flammable gas-air mixtures may form in empty receptacles.

• 7.2 Conditions for safe storage, including any incompatibilities • Storage:

• **Requirements to be met by storerooms and receptacles:** Store in a cool location.

Avoid storage near extreme heat, ignition sources or open flame.

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• **Information about storage in one common storage facility:** Store away from foodstuffs.

Store away from oxidizing agents.

• Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

• 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional i	nformation about design of technical facilities: No further data; se	ee item 7.
· 8.1 Control	parameters	
· Ingredients	with limit values that require monitoring at the workplace:	
9000-59-3 S		
EV (Canada) Long-term value: 10 mg/m³ total dust	
64-17-5 etha	nol	
PEL (USA)	Long-term value: 1900 mg/m³, 1000 ppm	
REL (USA)	Long-term value: 1900 mg/m³, 1000 ppm	
TLV (USA)	Short-term value: 1880 mg/m ³ , 1000 ppm	
EL (Canada)	Short-term value: 1000 ppm	
EV (Canada) Long-term value: 1,900 mg/m³, 1,000 ppm	
57-55-6 Pro	pylene Glycol	
WEEL (USA) Long-term value: 10 mg/m³	
EV (Canada) Long-term value: 155* 10** mg/m³, 50* ppm	
	*vapour and aerosol,**aerosol only	
9004-34-6 C		
PEL (USA)	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction	
REL (USA)	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction	
TLV (USA)	Long-term value: 10 mg/m ³	
EL (Canada)	Long-term value: 10 mg/m ³	
) Long-term value: 10 mg/m³ paper fibre, total dust	
	urther relevant information available.	
-	urther relevant information available.	
	nformation: The lists valid during the making were used as basis.	(Contd. on page 6)

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(Contd. of page 5) · 8.2 Exposure controls · Personal protective equipment: General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes. Avoid close or long term contact with the skin. **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable. · Protection of hands: Protective gloves Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 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 can not be calculated in advance and has therefore to be checked prior to the application. · 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. • For the permanent contact gloves made of the following materials are suitable: Butyl rubber, BR Nitrile rubber, NBR Neoprene gloves Eye protection: Safety glasses · Body protection: Protective work clothing · Limitation and supervision of exposure into the environment No further relevant information available. **Risk management measures** See Section 7 for additional information. (Contd. on page 7)

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No further relevant information available.

9 Physical and chemical propertie	9 Physical and chemical properties				
9.1 Information on basic physical and General Information	chemical properties				
 Appearance: Form: Colour: Odour: Odour threshold: 	Pasty Green Alcohol-like Not determined.				
· pH-value:	Not determined.				
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Not Determined. 172 ° F / 78 °C				
· Flash point:	61 ° F / 16 °C				
 Flammability (solid, gaseous): 	Not applicable.				
· Auto/Self-ignition temperature:	572 ° F / 300 °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: Upper: 	3,3 Vol % 19,0 Vol %				
· Vapour pressure at 20 °C:	59 hPa				
 Density at 20 °C: Relative density Vapour density Evaporation rate 	1,3 g/cm ³ Not determined. Not determined. Not determined.				
 Solubility in / Miscibility with water: 	Fully miscible.				
· Partition coefficient (n-octanol/water)	Not determined.				
 Viscosity: Dynamic: Kinematic: 9.2 Other information 	Not determined. Not determined. No further relevant information available.				

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10 Stability and reactivity

· 10.1 Reactivity

- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: Slowly polymerizes when exposed to air.

10.3 Possibility of hazardous reactions

Flammable.

Reacts violently with oxidizing agents.

Used empty containers may contain product gases which form explosive mixtures with air.

Toxic fumes may be released if heated above the decomposition point.

· 10.4 Conditions to avoid

Keep ignition sources away - Do not smoke.

Store away from oxidizing agents.

- **10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products:
- Carbon monoxide and carbon dioxide
- Toxic metal oxide smoke

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin: Slight irritant effect on skin and mucous membranes.
- on the eye: Slight irritant effect on eyes.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

· Acute effects (acute toxicity, irritation and corrosivity): Vapours have narcotic effect.

12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: The product contains materials that are harmful to the environment.
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.

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· **vPvB:** Not applicable.

· 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

· 13.1 Waste treatment methods

Recommendation

Smaller quantities can be disposed of with household waste.

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

· Uncleaned packaging:

- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.



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de name: Broad Spectrum Threadlocker		
Label	3	(Contd. of page 9)
· IMDG, IATA		
e		
Class	3 Flammable liquids.	
Label	3	
14.4 Packing group		
DOT, ADR, IMDG, IATA	II	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Warning: Flammable liquids.	
Danger code (Kemler):	33	
EMS Number:	F-E,S-D	
14.7 Transport in bulk according to Ann		
MARPOL73/78 and the IBC Code	Not applicable.	
Transport/Additional information:		
ADR		
Limited quantities (LQ)	1L	
Transport category	2	
Tunnel restriction code	D/E	
UN "Model Regulation":	UN1133, ADHESIVES, 3, II	

15 Regulatory information

 \cdot 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot United States (USA)

· SARA

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

• Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65 (California):

· Chemicals known to cause cancer:

Reference to Titanium Dioxide is based on unbound respirable particles and is not generally applicable to product as supplied.

13463-67-7 titanium dioxide

• Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

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None of the ingredients is listed. Chemicals known to cause developmental toxicity:	
Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for	product
64-17-5 ethanol	product
· Carcinogenic Categories	
EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
· IARC (International Agency for Research on Cancer)	
13463-67-7 titanium dioxide	
TLV (Threshold Limit Value established by ACGIH)	
13463-67-7 titanium dioxide	A
64-17-5 ethanol	A
NIOSH-Ca (National Institute for Occupational Safety and Health)	
13463-67-7 titanium dioxide	
OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	
· Canada	
· Canadian Domestic Substances List (DSL)	
All ingredients are listed.	
· Canadian Ingredient Disclosure list (limit 0.1%)	
64-17-5 ethanol	
· Canadian Ingredient Disclosure list (limit 1%)	
57-55-6 Propylene Glycol	
15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out	

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

H225 Highly flammable liquid and vapour.

R11 Highly flammable.

· Abbreviations and acronyms:

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 DOT: US Department of Transportation IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

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ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) Flam. Liq. 2: Flammable liquids, Hazard Category 2 Sources SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com