LB90 PREMIUM HIGH-TEMPERATURE FLAMMABLE CONTACT ADHESIVE

DATA SHEET

Tensorbond®

PRODUCT DESCRIPTION

TensorBond® LB90 is a premium flammable high performance, sprayable industrial contact adhesive formulated for laminating contact bonding.
TensorBond® LB90 is designed for laminate and general bonding to many substrates via traditional bulk spray equipment.

APPLICATIONS

- Bonds laminate to particle board; including melamine, metals and most plastics
- Also bonds: leather, veneers, fabrics, upholstery, foam, cork, fiberglass and many plastics
- Laminating flexible material in nearly any application

DIRECTIONS FOR USE

- **TensorBond® LB90** should be applied to both surfaces to be bonded, 80% to 100% coverage. Allow to dry (until dry to the touch) parts should be mated under pressure. Apply pressure with a hand laminate roller or nip roller. Bonds should be made as soon practical. If adhesive is left to dry for over 30 minutes, parts should be recoated. Normal coverage required with web spray pattern is approximately 80%; however, porous surfaces may need a second coat. Initial bond is strong enough to allow cutting or trimming immediately although ultimate strength is achieved in 1-3 days. Store away from heat, flames or other sources of ignition.

Canister System Recommendation:

- If you'd like to save time and increase your efficiency, Quin Global recommends using the Tensorgrip canister system – a pre-pressurized canister of adhesive. Ask us about this adhesive in a canister.

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Tensorbond®

LB90 PREMIUM HIGH-TEMPERATURE FLAMMABLE CONTACT ADHESIVE

DATA SHEET
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BENEFITS

- Industrial version of Tensorbond aircraft contact adhesive
- Fast. High Tack
- Excellent coverage
- 80% of final strength achieved immediately
- Full strength achieved in 24 hours
- Fast drying with long open time (30-45 minutes)
- Excellent green strength and high heat resistance
- High temperature resistant
- No ODS (Ozone Depleting Substances)
- No chlorinated solvents

CHEMICAL TECHNICAL DATA

TYPICAL PROPERTIES

• VOC Content:	343 gm/L
• Solids:	17-22% (Liquid)
• Viscosity:	100-150 cps
• Appearance:	Clear/Neutral or Red
• Shelf Life:	8 Months
• Solvent:	Flammable
• Weight:	7lb/gal
• Shear Adhesion Failure Test - SAFT:	575°F

PACKAGING

- 1 gallon can
- 5 gallon pail
- 55 gallon drum

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Tensorbond®

SAFETY DATA SHEET
Tensorbond LB90 Neoprene Contact Adhesive

1. Identification

Product identifier

Product name Tensorbond LB90 Neoprene Contact Adhesive

Product number USA

Recommended use of the chemical and restrictions on use

Application Solvent-based Adhesive

Details of the supplier of the safety data sheet

Supplier

Quin Global USA
5710 F St.
Omaha, NE 68117
(402) 731 3636
(402) 731 1473
marketing.us@quin-global.com

Emergency telephone number

Emergency telephone Chemtrec: 1 800 424 9300 (Mon - Fri) 09:00 - 16:00

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Flam. Liq. 2 - H225

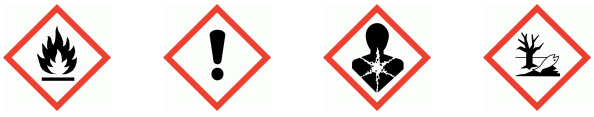
Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Repr. 2 - H361fd STOT SE 3 - H336 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 2 - H411

Human health The liquid may be irritating to eyes, respiratory system and skin. Symptoms following overexposure may include the following: Headache. Dizziness. Nausea, vomiting.

Label elements

Pictogram



Signal word Danger

Tensorbond LB90 Neoprene Contact Adhesive

Hazard statements

H225 Highly flammable liquid and vapor.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 If on skin: Wash with plenty of water.
P303+P361+P353 If on skin (or hair): 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.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235 Store in a well-ventilated place. Keep cool.

Contains

Acetone, n-Hexane, Toluene, 2-Propanol

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Substances

Mixtures

Acetone **30-60%**

CAS number: 67-64-1

Classification

Flam. Liq. 2 - H225
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2A - H319
STOT SE 3 - H336

Tensorbond LB90 Neoprene Contact Adhesive

n-Hexane	**10-30%**
CAS number: 110-54-3 M factor (Acute) = 1	

Classification
Flam. Liq. 2 - H225
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2A - H319
Repr. 2 - H361f
STOT SE 3 - H336
STOT RE 2 - H373
Aquatic Chronic 2 - H411

Toluene	**10-30%**
CAS number: 108-88-3	

Classification
Flam. Liq. 2 - H225
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Repr. 2 - H361d
STOT SE 3 - H336
STOT RE 2 - H373
Asp. Tox. 1 - H304

2-Propanol	**1-5%**
CAS number: 67-63-0	

Classification
Flam. Liq. 2 - H225
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
STOT SE 3 - H336

The Full Text for all Hazard Statements are Displayed in Section 16.

4. First-aid measures

Description of first aid measures

General information Remove affected person from source of contamination. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention if any discomfort continues.

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Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.

Ingestion Get medical attention immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Skin Contact Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Only remove contact lenses if the person is conscious, coherent and they can remove them themselves If adhesive bonding occurs, do not force eyelids apart. Continue to rinse for at least 15 minutes. If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

Most important symptoms and effects, both acute and delayed

Inhalation May cause coughing and difficulties in breathing. May cause eye and respiratory system irritation. Overexposure may depress the central nervous system, causing dizziness and intoxication.

Ingestion Aspiration hazard if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal tract. May Cause the following effects: Gastrointestinal symptoms, including upset stomach. Nausea, vomiting. Central nervous system depression. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Skin contact May be absorbed through the skin. Product has a defatting effect on skin. The liquid is irritating to eyes and skin. Remove contaminated clothing. A single exposure may cause the following adverse effects: Dryness and/or cracking.

Eye contact Causes serious eye irritation. Burns can occur. A single exposure may cause the following adverse effects: Pain. Conjunctivitis, irritation, tearing. Prolonged or repeated exposure may cause the following adverse effects: Irritation of eyes and mucous membranes. Prolonged contact causes serious eye and tissue damage.

5.Fire-fighting measures

Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapors are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8. No smoking, sparks, flames or other sources of ignition near spillage.

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Environmental precautions

Environmental precautions Avoid discharge into drains. Contain spillage with sand, earth or other suitable non-combustible material.

Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

7. Handling and storage

Precautions for safe handling

Usage precautions Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level. Container must be kept tightly closed when not in use. Use explosion proof electric equipment. Avoid discharge into drains or watercourses or onto the ground.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Keep container tightly closed. Keep only in the original container.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

Acetone

Long-term exposure limit (8-hour TWA): ACGIH 500 ppm
Short-term exposure limit (15-minute): ACGIH 750 ppm
A4
Long-term exposure limit (8-hour TWA): OSHA 1000 ppm 2400 mg/m³
Ceiling exposure limit: NIOSH: National Institute of Occupational Safety and Health 250 ppm 590 mg/m³ vapour

n-Hexane

Long-term exposure limit (8-hour TWA): ACGIH 50 ppm
Sk
Ceiling Value: OSHA_TRANS 500 ppm 1800 mg/m3
Long-term exposure limit (8-hour TWA): OSHA 50 ppm 180 mg/m³

Toluene

Long-term exposure limit (8-hour TWA): ACGIH 20 ppm
A4
Short-term exposure limit (15-minute): NIOSH: National Institute of Occupational Safety and Health 150 ppm 560 mg/m³
Ceiling Value: OSHA 300 ppm
Long-term exposure limit (8-hour TWA): OSHA 200 ppm

2-Propanol

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Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m³
Long-term exposure limit (8-hour TWA): OSHA 400 ppm 980 mg/m³
Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m³
A4
ACGIH = American Conference of Governmental Industrial Hygienists.
OSHA = Occupational Safety and Health Administration.
Sk = Danger of cutaneous absorption.
A4 = Not Classifiable as a Human Carcinogen.

Exposure controls

Protective equipment

Appropriate engineering controls	This product must not be handled in a confined space without adequate ventilation. Avoid inhalation of vapors and spray/mists. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapor or mist.
Eye/face protection	Wear chemical splash goggles.
Hand protection	Use protective gloves.
Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.
Hygiene measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. If exposure levels are likely to be exceeded, use a full face mask fitted with an organic AXP3 filter for short term low level exposures. For long term or high level exposures, compressed airline breathing apparatus should be used.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Clear. Amber.
Odor	Organic solvents.
Melting point	Not determined.
Initial boiling point and range	55°C/131°F @ 1013.25 mbar
Flash point	-26°C/-14.8°F
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.2 g/100 g Upper flammable/explosive limit: 13 g/100 g
Vapour pressure	233 hPa @ °C
Relative density	0.82
Bulk density	Not determined.

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Solubility(ies)	Negligibly soluble in water
Auto-ignition temperature	240°C/464°F
Volatile organic compound	This product contains a maximum VOC content of 343 g/l.

10. Stability and reactivity

Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Vapors may form explosive mixture with air.
Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Oxidizing agents. Reducing agents.
Materials to avoid	Oxidizing agents. Bases. Strong acids.
Hazardous decomposition products	Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen chloride (HCl). Nitrous gases (NOx).

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	595.23809524

Acute toxicity - dermal

ATE dermal (mg/kg)	1,309.52380952

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	13.0952381

Toxicological information on ingredients.

Acetone

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,800.0
Species	Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	20,000.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} dust/mist mg/l)	76.0
Species	Rat

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ATE inhalation (vapours mg/l)	11.0

Specific target organ toxicity - single exposure

STOT - single exposure	May cause drowsiness or dizziness

Inhalation	Mucosal irritations. Absorption.
Ingestion	Irritating. May cause nausea, stomach pain and vomiting. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
Skin Contact	This product is moderately irritating. May be absorbed through the skin. Repeated exposure may cause skin dryness or cracking.
Eye contact	This product is strongly irritating. Risk of corneal clouding.
Route of entry	Inhalation Skin and/or eye contact
Target Organs	Eyes

n-Hexane

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	25,000.0
Species	Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,000.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	171.6
Species	Rat
ATE inhalation (vapours mg/l)	11.0

Reproductive toxicity

Reproductive toxicity - fertility	Suspected of damaging fertility.

Specific target organ toxicity - single exposure

STOT - single exposure	May cause drowsiness or dizziness
Target organs	Central nervous system

Specific target organ toxicity - repeated exposure

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STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Target organs	Central nervous system

Aspiration hazard

Aspiration hazard	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
General information	After absorption. Tiredness. Narcosis. After long term exposure to the chemical: CNS disorders, paralysis symptoms. (It generally applies to aliphatic hydrocarbons with 6 - 18 carbon atoms that they cause pneumonia, in some cases also pulmonary edema, upon direct inhalation, i.e. in conditions that can occur only in very special circumstances (nebulizations, spraying, inhalation of aerosols and similar.)) Absorbtion of large quantities may cause: Narcosis. Possible risk of adverse reproductive effects.
Inhalation	May cause drowsiness or dizziness. Vapors irritate the respiratory system.
Ingestion	Irritating. May cause nausea, stomach pain and vomiting.
Skin Contact	The product is irritating to eyes and skin.
Eye contact	Risk of corneal clouding.
Route of entry	Inhalation Skin and/or eye contact
Target Organs	Eyes Skin Respiratory system, lungs Central nervous system Peripheral nervous system

Toluene

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	636.0
Species	Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	12,124.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	28.1
Species	Rat
ATE inhalation (vapours mg/l)	11.0

2-Propanol

Acute toxicity - oral

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Acute toxicity oral (LD_{50} mg/kg)	5,045.0
Species	Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	12,800.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	15,981.7
Species	Rat
ATE inhalation (vapours mg/l)	11.0

Skin corrosion/irritation

Animal data	Slightly irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Irritating.

Respiratory sensitization

Respiratory sensitisation	No information available.

Skin sensitization

Skin sensitisation	No information available.

Carcinogenicity

Carcinogenicity	Does not contain any substances known to be carcinogenic.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Specific target organ toxicity - single exposure

STOT - single exposure	May cause drowsiness or dizziness

Aspiration hazard

Aspiration hazard	No data available.
Medical Symptoms	High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Central nervous system depression. Liver damage.

12. Ecological Information

13. Disposal considerations

Waste treatment methods

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Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. Transport information

Air transport notes 1. 5L, 2. 60L

UN Number

UN No. (DOT) 1133 or Limited Quantity <5L

UN No. (ICAO) 1133

UN proper shipping name

Proper shipping name (DOT) Adhesives

Transport hazard class(es)

DOT hazard class 3

Transport labels

Packing group

II

15. Regulatory information

Inventories

US - TSCA

Present.

Toluene

n-Hexane

Acetone

16. Other information

Revision date 11/10/2015

Revision 3

Supersedes date 8/21/2015

SDS No. 21228

Tensorbond LB90 Neoprene Contact Adhesive

Hazard statements in full	H225 Highly flammable liquid and vapor. H302 Harmful if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.
ACA HMIS Health rating.	Moderate hazard. (2)
ACA HMIS Flammability rating.	Ignites easily. (3)
ACA HMIS Physical hazard rating.	Normally stable. (0)
ACA HMIS Personal protection rating.	B