# **LB28** HIGH-TEMPERATURE FLAMMABLE BRUSH GRADE CONTACT ADHESIVE

# PRODUCT DESCRIPTION

**TensorBond® LB28** is a flammable high performance, industrial brush contact adhesive formulated for general contact bonding.

**TensorBond® LB28** is designed for laminate and general bonding to many substrates via traditional industrial brush methods.

# APPLICATIONS

- Bonds laminate to particle board, including melamine, metals and most plastics
- Also bonds: veneers, fabrics, upholstery, foam, cork, leather, fiberglass, and rubber
- Laminating flexible material in nearly any application
- Excellent for small crevices and narrow edge banding, especially where overspray cannot be tolerated

# **DIRECTIONS FOR USE**

TensorBond® LB28 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 prepressurized canister of adhesive. Ask us about this adhesive in a canister.

DATA SHEE

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#### **QUIN GLOBAL US**

5710 F ST. Omaha NE 68117 PH: +1 402 731 3636 | info.us@quin-global.com | www.quinglobal.com



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DATA SHEET

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# BENEFITS

- 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:
- Solids:
- Viscosity:
- Appearance:
- Shelf Life:
- Solvent:
- Weight:
- •

#### PACKAGING

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

375.74 gm/l (3.14#/gal)

17-21%

- 400-700 cps Neutral
- 12 Months
- Flammable
- 6.71#/gal

DISCLAIMER OF WARRANTY: Quin Global makes neither warranty of merchantability or fitness for any use nor any other warranty, express or implied, in the sales of its products. Buyer assumes all risk and liability for the results obtained by the use of its products, whether used singly or in combination with other products.

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# Tensorbond

## SAFETY DATA SHEET LB28 Brush Grade Flammable Contact Adhesive

1. Identification		
Product identifier		
Product name	LB28 Brush Grade Flammable Contact Adhesive	
Product number	USA	
Recommended use of the ch	emical 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		
2. Hazard(s) identification	e or mixture	
	r <mark>e or mixture</mark> Flam. Liq. 3 - H226	
Classification of the substance		
Classification of the substance Physical hazards	Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2A	
Classification of the substance Physical hazards Health hazards	Flam. Liq. 3 - H226 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	
Classification of the substance Physical hazards Health hazards Environmental hazards	Flam. Liq. 3 - H226 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 Aquatic Chronic 2 - H411 The liquid may be irritating to eyes, respiratory system and skin. Symptoms following	
Classification of the substance Physical hazards Health hazards Environmental hazards Human health	Flam. Liq. 3 - H226 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 Aquatic Chronic 2 - H411 The liquid may be irritating to eyes, respiratory system and skin. Symptoms following	

Hazard statements	<ul> <li>H226 Flammable liquid and vapor.</li> <li>H302 Harmful if swallowed.</li> <li>H315 Causes skin irritation.</li> <li>H319 Causes serious eye irritation.</li> <li>H336 May cause drowsiness or dizziness.</li> <li>H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.</li> <li>H373 May cause damage to organs through prolonged or repeated exposure.</li> <li>H411 Toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	<ul> <li>P301+P310 If swallowed: Immediately call a poison center/doctor.</li> <li>P302+P352 If on skin: Wash with plenty of water.</li> <li>P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</li> <li>P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.</li> <li>P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P312 Call a poison center/doctor if you feel unwell.</li> </ul>
Contains	Acetone, n-Hexane, Heptane, Toluene

#### 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	

n-Hexane	10-30%
CAS number: 110-54-3	10-50%
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	
Heptane	10-30%
CAS number: 142-82-5	
M factor (Acute) = 1 M facto	· (Chronic) = 1
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
Toluene CAS number: 108-88-3	10-30%
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	
The Full Test for all lines 100 for the Dist.	
The Full Text for all Hazard Statements are Displa	/ed in Section 16.

Description of first aid measures

General Information         Remove affected person from source of contamination. Place unconscious person on their size in the recovery position and ensure breathing can take place. Get medical attention if any discomfort continues.           Inhelation         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 to their size of the presenter is a difficult, properly trained 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 affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention or famp 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 micrial attention in promptly. Show this Safety Data Sheet to the medical person is conscious, coherent and they can remove them themselves if adhesive bonding occurs, do not three eyelids apart. Continue to sins, cluding upset stomach. Nauses, vorting, Cause severe irritation of the mouth, the esophagus and the ga
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 any contact lenses and open eyelids wide apart. Chry remove contaminated clothing. Wash skin thoroughly with scap and water. Get medical attention if any discomfort continues.         Eye contact       Remove any contact lenses and open eyelids wide apart. Chry 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 initaktion. Overexposure may depress the central nervous system, causing dizziness and intoxication.         Ingestion       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 rawy cause severe irritation of the mouth, the esophagus and the gastrointestinal tract. May Cause the following adverse effects: Train, Conjunctivits, irritation, tearing, Prolonged or repeated exposure may cause the following adverse effects: Irritation. Burns can occur. A single exposure may cause the following adverse effects: Train. Conjunctivi
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Extinguishing media         Suitable extinguishing media         Extinguishing media         Do not use water jet as an extinguisher, as this will spread the fire.         media         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.
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.
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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 equipmentWear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.for firefightersclothing.
6. Accidental release measures

Personal precautions, protect	ive equipment and emergency procedures	
Personal precautions	For personal protection, see Section 8. No smoking, sparks, flames or other sources of ignition near spillage.	
Environmental precautions		
Environmental precautions	Avoid discharge into drains. Contain spillage with sand, earth or other suitable non- combustible material.	
Methods and material for cont	ainment 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, in	icluding 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/persona	I protection	
Control parameters Occupational exposure limits Acetone		
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/m <sup>3</sup>		
Heptane		
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/m<sup>3</sup> Ceiling Value: OSHA 300 ppm

Long-term exposure limit (8-hour TWA): OSHA 200 ppm

ACGIH = American Conference of Governmental Industrial Hygienists. Sk = Danger of cutaneous absorption. A4 = Not Classifiable as a Human Carcinogen.

OSHA = Occupational Safety and Health Administration.

#### 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 Prop	perties

#### Information on basic physical and chemical properties

10. Stability and reactivity	
Volatile organic compound	This product contains a maximum VOC content of 579 g/l.
Solubility(ies)	Negligibly soluble in water
Flash point	-25.99°C/-14.78°F
Initial boiling point and range	56°C/133°F @
Odor	Ketone.
Color	Clear. Amber.
Appearance	Liquid.

Stability

Stable at normal ambient temperatures and when used as recommended.

Possibility o reactions	f hazardous	Vapors r	nay form explosive mixture with air.
Conditions t	o avoid		eat, flames and other sources of ignition. Avoid contact with the following materials: g agents. Reducing agents.
Materials to	avoid	Oxidizing oxychlor	g agents. Reducing agents. Bases. Acetone reacts violently with phosphorous ide
Hazardous of products	decomposition		ates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). es. Hydrocarbons.
11. Toxicolo	gical information		
Information	on toxicological eff	ects	
Acute toxicit			
ATE oral (m	g/kg)	537.634	4086
Acute toxicit	y - dermal		
ATE dermal		1,182.79	569892
Acute toxicit	y - inhalation		
ATE inhalati	ion (vapours mg/l)	11.8279	5699
Toxicologica	al information on in	gredients.	
Acetone			
	Acute toxicity - or	al	
	Acute toxicity ora		5,800.0
	mg/kg)		0,000.0
	Species		Rat
	ATE oral (mg/kg)		500.0
	Acute toxicity - de	ermal	
	Acute toxicity der	mal (LD₅₀	20,000.0
	mg/kg)		
	Species		Rabbit
	ATE dermal (mg/	kg)	1,100.0
	Acute toxicity - in	halation	
	Acute toxicity inh (LC₅₀ dust/mist m		76.0
	Species		Rat
	ATE inhalation (v mg/l)	apours	11.0
	Specific target or	gan toxicit	y - single exposure
	STOT - single ex		May cause drowsiness or dizziness
	Inhalation		Mucosal irritations. Absorption.

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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 (LD₅₀ mg/kg)	25,000.0	
Species	Rat	
ATE oral (mg/kg)	500.0	
Acute toxicity - dermal		
Acute toxicity dermal (LD∞ mg/kg)	2,000.0	
Species	Rabbit	
ATE dermal (mg/kg)	1,100.0	
Acute toxicity - inhalation		
Acute toxicity inhalation (LC∞ 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 toxicit	y - repeated exposure	
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	

Heptane

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	500.0
Acute toxicity - dermal	
Acute toxicity dermal (LD₅₀ mg/kg)	2,000.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	29.3
Species	Rat
ATE inhalation (vapours mg/l)	11.0
Carcinogenicity	
Carcinogenicity	Does not contain any substances known to be carcinogenic.
Specific target organ toxicit	y - single exposure
STOT - single exposure	May cause drowsiness or dizziness
General information	Absorbtion of large quantities may cause: Narcosis. Death.

#### Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)		636.0
Species		Rat
ATE oral (mg/kg)		500.0
Acute toxicity - dermal		
Acute toxicity der mg/kg)	mal (LD₅₀	12,124.0
Species		Rabbit
ATE dermal (mg/kg)		1,100.0
Acute toxicity - inhalation Acute toxicity inhalation (LC <sub>50</sub> vapours mg/l)		28.1
Species		Rat
ATE inhalation (v mg/l)	apours	11.0
12. Ecological Information		
13. Disposal considerations		
Waste treatment methods		
Disposal methods		of waste to licensed waste disposal site in accordance with the requirements of the ste 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)	Adhesive	es
Transport hazard class(es)		
DOT hazard class	3	
Transport labels		
Packing group		

Inventories

US - TSCA	
Present.	
Heptane	
Toluene	
Acetone	
n-Hexane	
16. Other information	
Revision date	11/23/2015
Revision	4
Supersedes date	11/10/2015
SDS No.	21028
Hazard statements in full	<ul> <li>H226 Flammable liquid and vapor.</li> <li>H302 Harmful if swallowed.</li> <li>H312 Harmful in contact with skin.</li> <li>H315 Causes skin irritation.</li> <li>H319 Causes serious eye irritation.</li> <li>H332 Harmful if inhaled.</li> <li>H336 May cause drowsiness or dizziness.</li> </ul>

	H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.	
	H373 May cause damage to organs through prolonged or repeated exposure.	
	H400 Very toxic to aquatic life.	
	H410 Very toxic to aquatic life with long lasting effects.	
	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	Normally stable. (0)	

rating. ACA HMIS Personal B protection rating.

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