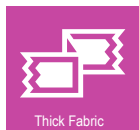


F50

LOW VOC SPRAY CONTACT ADHESIVE

DATA SHEET

TensorGrip®



As part of our FOAM & FABRIC range, F50 is a web spray adhesive designed for use in Domestic Furniture, Office Furniture and Mattress applications using the substrates listed.

PRODUCT DESCRIPTION

TensorGrip® F50 is a high solids contact adhesive that effectively bonds a vast range of substrates while maintaining compliance with stringent California VOC requirements (SCAQMD Rule 1168). Formulated with CO-REZ Technology, which is an exceptional formulation incorporating a highly engineered resin and gas matrix. The result: Greater Coverage from Less Canister Weight.

ADVANTAGES

- Aggressive – superb bonds to porous foams
- Tough, flexible adhesion to thick fabrics
- Fast dry with excellent initial bond
- Good heat resistance (up to 180°F)
- High-strength, long-term bond
- Web Spray
- 80% of final strength achieved immediately
- Full strength achieved in 24 hours

DIRECTIONS FOR USE

- TensorGrip® F50 is designed as a portable, self-contained spray system for field or shop applications.
- Apply adhesive to both surfaces to be mated, at 80% to 100% coverage.
- Allow enough time (2-4 minutes or until dry to the touch) for the adhesive to become tacky before bonding.
- Parts should be mated with as much pressure as practical.
- 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.
- Canister system will spray adequately above 60° F. Canister system should be kept in warm area. In the event that the canister gets abnormally chilled, freezes or gives poor or sputtering spray, it should be warmed up before continued usage. Warming canister by immersion in warm water is recommended.
- Notice!!! Do not store at temperatures over 120° F.

CANISTER STORAGE/CHANGE OVER

- If you choose to leave the hose and spray gun on the canister, leave the valve on the canister open. Do not disconnect the hose/gun from the canister. Close and lock the spray gun.
- To change or disconnect canister: turn canister valve to the off position, spray out remaining adhesive left in the hose, disconnect the spray hose and gun from the canister.
- Reconnect the spray hose to a new canister of adhesive. OR if you are NOT connecting to a new canister, connect hose to canister of cleaning solvent (sold separately) and spray out until liquid is clear which indicates that the hose and gun is clean.

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F50

LOW VOC SPRAY CONTACT ADHESIVE

DATA SHEET
Tensorgrip[®]

CHEMICAL TECHNICAL DATA

TYPICAL PROPERTIES

- | | |
|-----------------------|---|
| • Total Solids | 32-38% |
| • VOC Content | 45 g/l (Canister) and 35.9% by weight (Aerosol) |
| • Color | Red, Clear |
| • System Flammability | Flammable Adhesive, Non-Flammable Propellant (Canister) Flammable Adhesive and Propellant (Aerosol) |
| • Solvent System | Methyl Acetate |
| • Dry time | 2-4 mins dependent on temp & humidity |
| • Open time | Long |
| • Shelf Life | 18 months from date of manufacture |

PACKAGING

- | | |
|---------|---------------------|
| • 650ml | Aerosol Cans |
| • 22L | Disposable Canister |
| • 108L | Returnable Canister |
| • 216L | Returnable Canister |

STORAGE

HANDLING & STORAGE

- Consult Safety Data Sheet prior to use.
- Do not store at temperatures over 120°F/50°C.
- Avoid exposure to direct sunlight.
- Do not store directly on concrete floor.
- Always store above 60°F/15°C
- When connected, keep valve open and hose pressurized at all times
- Always test our adhesives to determine suitability for your particular application prior to use in production

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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SAFETY DATA SHEET

Tensorgrip F50AA Low VOC Contact Adhesive

1. Identification

Product identifier

Product name Tensorgrip F50AA Low VOC Contact Adhesive
Product number USA

Recommended use of the chemical and restrictions on use

Application Aerosol Spray Adhesive

Details of the supplier of the safety data sheet

Supplier Tensorgrip
 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

2. Hazard(s) identification

Classification of the substance or mixture

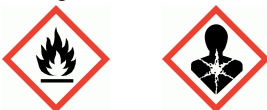
Physical hazards Flam. Aerosol 1 - H222
Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2A - H319 Repr. 2 - H361f STOT SE 3 - H336 STOT RE 2 - H373
Environmental hazards Aquatic Chronic 3 - H412

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

Hazard statements

H302+H332 Harmful if swallowed or if inhaled.
 H222 Extremely flammable aerosol.
 H319 Causes serious eye irritation.
 H361f Suspected of damaging fertility.
 H336 May cause drowsiness or dizziness.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.

Tensorgrip F50AA Low VOC Contact Adhesive

Precautionary statements	<p>P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P308+P313 If exposed or concerned: Get medical advice/ attention.</p> <p>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C /122°F.</p>
Supplemental label information	<p>AT(o) 15.0% of the mixture consists of ingredient(s) of unknown acute oral toxicity.</p> <p>Contains 6.671 % of components with unknown hazards to the aquatic environment.</p>
Contains	Methyl Acetate, Propane, Isobutane, n-Hexane

Other hazards

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

3. Composition/information on ingredients

Mixtures

Methyl Acetate 30-60% CAS number: 79-20-9
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H336
Isobutane 10-25% CAS number: 75-28-5
Classification Flam. Gas 1 - H220 Press. Gas, Compressed - H280
Propane 10-25% CAS number: 74-98-6
Classification Flam. Gas 1 - H220 Press. Gas, Liquefied - H280 Acute Tox. 4 - H332 Simple Asphyxiant - USH03

Tensorgrip F50AA Low VOC Contact Adhesive

n-Hexane 5-10% 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

The full text for all hazard statements is 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.
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

General information	High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged or repeated exposure may cause the following adverse effects: Irritation of nose, throat and airway. Coughing. Headache.
Ingestion	Prolonged or repeated exposure may cause the following adverse effects: Gastrointestinal symptoms, including upset stomach. Nausea, vomiting. Diarrhea.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.

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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 Pressurized container: Must not be exposed to temperatures above 50°C/120°F 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.

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. Pressurized container: Must not be exposed to temperatures above 50°C/120°F

Specific end uses(s)

Tensorgrip F50AA Low VOC Contact Adhesive

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

Methyl Acetate

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

Short-term exposure limit (15-minute): ACGIH 250 ppm

Long-term exposure limit (8-hour TWA): OSHA 200 ppm 610 mg/m³

Isobutane

Long-term exposure limit (8-hour TWA): ACGIH 1000 ppm

Long-term exposure limit (8-hour TWA): NIOSH: National Institute of Occupational Safety and Health 800 ppm 1900 mg/m³

Propane

Long-term exposure limit (8-hour TWA): NIOSH: National Institute of Occupational Safety and Health 1800 mg/m³ 1000 ppm

Long-term exposure limit (8-hour TWA): OSHA 1800 ppm 1000 mg/m³

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

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

Sk = Danger of cutaneous absorption.

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 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 half face mask fitted with an organic vapor filter for short term low level exposures. For long term or high level exposures, a supplied air respirator should be used.

9. Physical and chemical properties

Information on basic physical and chemical properties

Tensorgrip F50AA Low VOC Contact Adhesive

Appearance	Aerosol.
Color	Clear. Red.
Odor	Organic solvents.
Initial boiling point and range	-42.1°C (-43.8°F)
Flash point	-104°C/-155°F Closed cup.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 9.5 g/100 g Lower flammable/explosive limit: 2.1 g/100 g
Relative density	~ .928
Solubility(ies)	Negligibly soluble in water
Volatile organic compound	This product contains a maximum VOC content of 35.9% by weight .

10. Stability and reactivity

Stability	Stable at normal ambient temperatures and when used as recommended.
Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Oxidizing agents. Reducing agents.
Hazardous decomposition products	Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂). Aldehydes. Halogenated hydrocarbons.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 924.11

Acute toxicity - dermal

ATE dermal (mg/kg) 2,391.82

Acute toxicity - inhalation

ATE inhalation (gases ppm) 30,000.0

ATE inhalation (vapours mg/l) 18.04

Toxicological information on ingredients.

Methyl Acetate

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 Rat

ATE dermal (mg/kg) 1,100.0

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Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 49.28

Species Rat

ATE inhalation (vapours mg/l) 11.0

Isobutane

Toxicological effects No information available.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

Inhalation Suffocation (asphyxiant) hazard

Skin Contact Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin.

Eye contact Spray will evaporate and cool quickly and may cause frostbite or cold burns if in contact with skin.

Propane

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ gases ppmV) 1,442.0

Species Rat

Acute toxicity inhalation (LC₅₀ vapours mg/l) 1,442.0

Species Rat

ATE inhalation (gases ppm) 4,500.0

ATE inhalation (vapours mg/l) 11.0

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 (LD₅₀ mg/kg) 2,000.0

Species Rabbit

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ATE dermal (mg/kg)	1,100.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	171.6
Species	Rat
ATE inhalation (vapours mg/l)	11.0
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Suspected of damaging fertility.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	May cause drowsiness or dizziness
Target organs	Central nervous system
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Target organs	Central nervous system
<u>Aspiration hazard</u>	
Aspiration hazard	Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
<u>General information</u>	
	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.)) Absorption 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 exposure	Inhalation Skin and/or eye contact
Target Organs	Eyes Skin Respiratory system, lungs Central nervous system Peripheral nervous system

12. Ecological information

13. Disposal considerations

Waste treatment methods

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

Tensorgrip F50AA Low VOC Contact Adhesive

14. Transport information

Air transport notes	1. <75kg, 2. <150kg
UN Number	
UN No. (ICAO)	1950
UN No. (DOT)	Limited Quantity <1L, Aerosol
UN proper shipping name	
Proper shipping name (TDG)	Chemical Under Pressure, Flammable, N.O.S.
Proper shipping name (DOT)	Chemical Under Pressure, Flammable, N.O.S.
Transport hazard class(es)	

Transport labels



Packing group

Packing group (International) Not applicable.

15. Regulatory information

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).
Guidance	CHIP for everyone HSG228. Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131.

US Federal Regulations

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed or exempt:

n-Hexane

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

SARA 313 Emission Reporting

The following ingredients are listed or exempt:

n-Hexane

100%

SARA (311/312) Hazard Categories

Hazard

Isobutane

Fire
Pressure
Hazard

Methyl Acetate

Fire
Acute
Chronic
Health hazard

Tensorgrip F50AA Low VOC Contact Adhesive

Propane

Yes.

n-Hexane

Acute
Chronic
Health hazard
Fire

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

This product does not contain any chemicals known to the State of California to cause cancer, birth or any other reproductive harm.

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Isobutane

Present

Methyl Acetate

Present

Propane

Present

n-Hexane

Present

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Isobutane

Present.

Methyl Acetate

Present.

Propane

Present.

n-Hexane

Present.

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Isobutane

Present.

Methyl Acetate

Present.

Propane

Present.

n-Hexane

Present.

Inventories

Canada - DSL/NDSL

The following ingredients are listed or exempt:

Methyl Acetate

Present.

Tensorgrip F50AA Low VOC Contact Adhesive

Propane

DSL
Present.

n-Hexane

DSL

US - TSCA

Present.

Methyl Acetate

Present.

Propane

Present.

n-Hexane

Present.

16. Other information

Revision date	12/14/2018
Revision	10
Supersedes date	9/24/2018
SDS No.	20425
Hazard statements in full	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapor. H280 Contains gas under pressure; may explode if heated. 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. H361f Suspected of damaging fertility. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. USH03 May displace oxygen and cause rapid suffocation
ACA HMIS Health rating.	Slight hazard. (1)
ACA HMIS Flammability rating.	Extremely flammable. (4)
ACA HMIS Physical hazard rating.	Normally stable. (0)
ACA HMIS Personal protection rating.	B

DIRECTIONS FOR USE

PRODUCT LOGO

Tensorgrip F50AA Low VOC Contact Adhesive

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. The manufacturer MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. Given the variety of factors that can affect the use and application of this product, many of which are solely within the user's knowledge and control, the user is responsible for determining whether the usage of this product is fit for a particular purpose and suitable for the user's method of use or application. It is essential that the user, not the manufacturer, evaluates this product to determine whether it is fit for a particular purpose and suitable for the user's method of use or application.