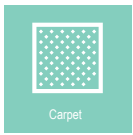


M28 HIGH TACK CA COMPLIANT CONTACT ADHESIVE

DATA SHEET
Tensorgrip



Carpet



Fabric



Plywood



Metal/Aluminum Sheetting



FRP/GRP



As part of our **MARINE** range, **M28** is a web spray adhesive designed for use in applications using the substrates listed.

PRODUCT DESCRIPTION

TensorGrip M28 is a multi-purpose 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

- High tack version of CA compliant contact adhesive
- High build is effective on porous or less smooth surfaces
- Heat resistance above 200° F
- Aggressive High-Strength, Permanent Bond

DIRECTIONS FOR USE

- **TensorGrip M28** 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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HIGH TACK CA COMPLIANT CONTACT ADHESIVE

DATA SHEET
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CHEMICAL TECHNICAL DATA

TYPICAL PROPERTIES

- | | |
|-----------------------|--|
| • Total Solids | 32-38% |
| • VOC Content | 75 g/L Canister |
| • Color | Red, Clear |
| • System Flammability | Flammable Adhesive; Non-Flammable Propellant |
| • 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

- | | |
|--------|---------------------|
| • 7L | Disposable Canister |
| • 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

APPLICATION TOOLS

- Hoses: M130-12 (12' (For all canisters)), M130-18 (18' (For all canisters)) or M130-25 (25' (For 108L & 216L canister)), M130-36 (36' (For 216L canister)) or M130-50 (50' (For 216L canister))
- Spray Guns: M120 Adj. Spray Gun or M125 18" Wand Adj. Spray Gun
- Spray Tips: 11001B 4"-17" Med/High Build Adj Spray Pattern or 11002B 5" - 22" High Build Adj Spray Pattern

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Revision Date 1/2019



SAFETY DATA SHEET

TensorGrip M28 High Tack CA Compliant Contact Adhesive

1. Identification

Product identifier

Product name TensorGrip M28 High Tack CA Compliant Contact Adhesive

Product number USA

Recommended use of the chemical and restrictions on use

Application Canister 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 2 - H223

Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H312 Eye Irrit. 2A - H319 STOT SE 3 - H336

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 Warning

Hazard statements H302+H312 Harmful if swallowed or in contact with skin.
H223 Flammable aerosol.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

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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>P301+P312 If swallowed: Call a poison center/ doctor if you feel unwell.</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>P412 Do not expose to temperatures exceeding 50°C/122°F.</p>
Supplemental label information	<p>AT(d) 15.15% of the mixture consists of ingredient(s) of unknown acute dermal toxicity.</p> <p>AT(o) 15.15% of the mixture consists of ingredient(s) of unknown acute oral toxicity.</p>
Contains	Methyl Acetate, Pentane

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
Pentane 10-25% CAS number: 78-78-4 M factor (Acute) = 1
Classification Flam. Liq. 1 - H224 Eye Irrit. 2A - H319 STOT SE 3 - H336 Asp. Tox. 1 - H304 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.

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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.
<u>Most important symptoms and effects, both acute and delayed</u>	
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. Central nervous system depression. Nausea, vomiting. 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. 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 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

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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)

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

Pentane

Long-term exposure limit (8-hour TWA): ACGIH 600 ppm

ACGIH = American Conference of Governmental Industrial Hygienists.

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.

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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	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

Appearance	Aerosol.
Color	Clear. Red.
Odor	Organic solvents.
Flash point	-20°F Not specified.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.4% Upper flammable/explosive limit: 16%
Vapor density	Heavier than air
Relative density	0.887
Solubility(ies)	Slightly soluble in water.
Volatile organic compound	This product contains a maximum VOC content of 75 g/l.

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.
Materials to avoid	Avoid contact with strong oxidizing agents. Avoid contact with strong reducing agents. Strong acids. Bases.
Hazardous decomposition products	Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂). Aldehydes. Hydrocarbons. Oxides of nitrogen. Cyanides.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 840.1

Acute toxicity - dermal

ATE dermal (mg/kg) 1,848.22

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 21.78

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Toxicological information on ingredients.

Methyl Acetate

Acute toxicity - oral

Acute toxicity oral (LD₅₀) 5,000.0
mg/kg)

Species Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀) 2,000.0
mg/kg)

Species Rat

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation 49.28
(LC₅₀ vapours mg/l)

Species Rat

ATE inhalation (vapours 11.0
mg/l)

Pentane

Acute toxicity - oral

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation 1,280.0
(LC₅₀ vapours mg/l)

Species Rat

ATE inhalation (vapours 11.0
mg/l)

Serious eye damage/irritation

Serious eye Irritation of eyes is assumed.
damage/irritation

Germ cell mutagenicity

Genotoxicity - in vitro Ames Test Results: Negative.

Specific target organ toxicity - single exposure

STOT - single exposure May cause drowsiness or dizziness

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

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Aspiration hazard

Aspiration hazard Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

General information

Absorbtion of large quantities may cause: Dizziness. Euphoria. Agitation. Convulsions. Narcosis.

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.

14. Transport information

Air transport notes Cargo aircraft only. <75kg

UN Number

UN No. (ICAO) 3501

UN No. (DOT) 3501

UN proper shipping name

Proper shipping name (TDG) Chemical Under Pressure, Flammable, N.O.S. (Methyl Acetate, Pentane)

Proper shipping name (DOT) Chemical Under Pressure, Flammable, N.O.S. (Methyl Acetate, Pentane)

Transport hazard class(es)

DOT hazard class 2.1

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

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
Present.

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SARA 313 Emission Reporting

Present.

SARA (311/312) Hazard Categories

Present.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

Present.

Massachusetts "Right To Know" List

Present.

New Jersey "Right To Know" List

Present.

Pennsylvania "Right To Know" List

Present.

Inventories

Canada - DSL/NDSL

Present.

US - TSCA

Present.

16. Other information

Revision date	12/21/2018
Revision	12
Supersedes date	12/14/2018
SDS No.	22138
Hazard statements in full	H223 Flammable aerosol. H224 Extremely flammable liquid and vapor. H225 Highly flammable liquid and vapor. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.
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

TensorGrip M28 High Tack CA Compliant Contact Adhesive

DIRECTIONS FOR USE

PRODUCT LOGO

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.