

# EPO-CAL

# LOW ODOR, LOW VOC REEFER REPAIR ADHESIVE

## DATA SHEET TensorGrip®



As part of our **TRANSPORT** range, **EPO-CAL** is a low odor web spray adhesive designed for use in repairing reefer trailers using the substrates listed.

## PRODUCT DESCRIPTION

**TensorGrip® EPO-CAL** is a reefer liner repair system eliminates blocking and bracing and reduces cure time to 5 minutes so you can increase your profits and keep your customers coming back! Now you can successfully repair a full refrigerated trailer wall in 45 minutes rather than the standard 24 hours. 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

- Pleasant, mild odor
- Compliant with California VOC laws
- Fast dry with excellent initial bond
- Good heat resistance (up to 200°F)
- Aggressive: high-strength, permanent bond
- 80% of final strength achieved immediately
- Full strength achieved in 24 hours
- Low VOC version of Tensorgrip EP0
- Fast coverage of large areas

## DIRECTIONS FOR USE

**TensorGrip EPO-CAL** is designed as a portable, self-contained spray system for refrigerated trailer repair. For Full Wall Repair:

- Be sure foam and liner are clean and free of grease, dirt, dust, etc.
- After attaching the gun and hose to the canister, holding spray nozzle 6-10 inches from away, spray wall with an even coat covering entire surface.
- Edges of spray pattern should slightly overlap to ensure complete coverage.
- Insert fiberglass liner (e.g. Kemlite®) into aluminum scuff and pinch between lip and wall.
- With liner laying on floor, spray liner evenly, using the same method of spray as used on the wall.
- Wait 5-10 minutes until adhesive is tacky and doesn't transfer to fingertips.
- Using 3-10 people, roll liner up wall - be sure liner is straight & flat against wall. Bond will be permanent, realignment is not possible.
- Roll with EPO Roller beginning in the center and working outward to ensure strong, permanent bond.
- Ultimate strength is achieved in 24 hours.
- 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.

QUIN GLOBAL US

5710 F ST. Omaha NE 68117

PH: +1 402 731 3636 | info.us@quin-global.com | www.quin-global.com

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## CHEMICAL TECHNICAL DATA

### TYPICAL PROPERTIES

- Total Solids 30-36%
- VOC Content 75 g/L (Canister) and 35.9% by weight (Aerosol)
- Color Red or Clear
- System Flammability Flammable adhesive; Non-Flammable propellant (Canisters)
- 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 can is item EP0-CA-AA. See item Tech Data Sheet for more details.
- 7L Disposable Canister
- 22L Disposable Canister
- 108L 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: M130-6 (6' for 7L canister), M130-12 (12'), M130-18 (18') or M130-25 (25' (only for 108L canister))
- Spray Guns: M120 Adj. Spray Gun or M125 18" Wand Adj. Spray Gun
- Spray Tips: 11001SS 4"-17" Med/High Build Adj Spray Pattern or 11002B 5" - 22" High Build Adj Spray Pattern
- Roller: EP0R 7" Wide Roller with 4' Handle

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.



## SAFETY DATA SHEET

### TensorGrip EP0-CAL Low Odor, Low VOC Reefer Repair Adhesive

#### 1. Identification

##### Product identifier

**Product name** TensorGrip EP0-CAL Low Odor, Low VOC Reefer Repair 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

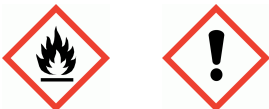
**Health hazards** Acute Tox. 4 - H302 Acute Tox. 4 - H312 Eye Irrit. 2A - H319 STOT SE 3 - H336

**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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<b>Precautionary statements</b>	<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>
<b>Supplemental label information</b>	<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>
<b>Contains</b>	Methyl Acetate, Pentane

### Other hazards

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

### 3. Composition/information on ingredients

#### Mixtures

<p><b>Methyl Acetate</b> <span style="float: right;"><b>30-60%</b></span></p> <p>CAS number: 79-20-9</p>
<p><b>Classification</b></p> <p>Flam. Liq. 2 - H225</p> <p>Acute Tox. 4 - H302</p> <p>Acute Tox. 4 - H312</p> <p>Acute Tox. 4 - H332</p> <p>Eye Irrit. 2A - H319</p> <p>STOT SE 3 - H336</p>
<p><b>Pentane</b> <span style="float: right;"><b>10-25%</b></span></p> <p>CAS number: 78-78-4</p> <p>M factor (Acute) = 1</p>
<p><b>Classification</b></p> <p>Flam. Liq. 1 - H224</p> <p>Eye Irrit. 2A - H319</p> <p>STOT SE 3 - H336</p> <p>Asp. Tox. 1 - H304</p> <p>Aquatic Chronic 2 - H411</p>

The full text for all hazard statements is displayed in Section 16.

### 4. First-aid measures

#### Description of first aid measures

<b>General information</b>	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.
<b>Inhalation</b>	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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<b>Ingestion</b>	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.
<b>Skin Contact</b>	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	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.
<b><u>Most important symptoms and effects, both acute and delayed</u></b>	
<b>Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Skin contact</b>	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.
<b>Eye contact</b>	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/m<sup>3</sup>

#### **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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<b>Hand protection</b>	Use protective gloves.
<b>Other skin and body protection</b>	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.
<b>Hygiene measures</b>	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.
<b>Respiratory protection</b>	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

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

### 10. Stability and reactivity

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Oxidizing agents. Reducing agents.
<b>Materials to avoid</b>	Avoid contact with strong oxidizing agents. Avoid contact with strong reducing agents. Strong acids. Bases.
<b>Hazardous decomposition products</b>	Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). 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 (LD<sub>50</sub>) 5,000.0  
mg/kg)

Species Rat

ATE oral (mg/kg) 500.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub>) 2,000.0  
mg/kg)

Species Rat

ATE dermal (mg/kg) 1,100.0

##### Acute toxicity - inhalation

Acute toxicity inhalation 49.28  
(LC<sub>50</sub> 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  
(LC<sub>50</sub> 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

<b>Revision date</b>	12/14/2018
<b>Revision</b>	4
<b>Supersedes date</b>	3/9/2018
<b>SDS No.</b>	22083
<b>Hazard statements in full</b>	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.
<b>ACA HMIS Health rating.</b>	Slight hazard. (1)
<b>ACA HMIS Flammability rating.</b>	Extremely flammable. (4)
<b>ACA HMIS Physical hazard rating.</b>	Normally stable. (0)
<b>ACA HMIS Personal protection rating.</b>	B

## TensorGrip EP0-CAL Low Odor, Low VOC Reefer Repair 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.