

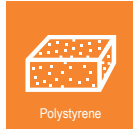


# PERFORMANCE PANEL ADHESIVE

DATA SHEET  
**TensorGrip®**



FRP/GRP



Polystyrene



Thick Fabric



As part of our CONSTRUCTION range, C11 is a web spray adhesive designed for use in applications using the substrates listed.

## PRODUCT DESCRIPTION

TensorGrip® C11 is a multi-purpose contact adhesive designed to effectively bond exterior grade substances to a vast range of substrates.

### ADVANTAGES

- High solids
- High temperature resistance
- Polystyrene and EPS compatible
- Aggressive – Adheres to nearly any surface
- Web Spray

## DIRECTIONS FOR USE

- TensorGrip® C11 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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**TensorGrip®**



# PERFORMANCE PANEL ADHESIVE

DATA SHEET  
**Tensorgrip**<sup>®</sup>

## CHEMICAL TECHNICAL DATA

### TYPICAL PROPERTIES

• Total Solids	25-31%
• VOC Content	568 g/L
• Color	Red, Clear
• System Flammability	Flammable Adhesive; Flammable Propellant
• Solvent System	Acetone
• Dry time	2-4 mins dependent on temp & humidity
• Open time	Long
• Shelf Life	18 months from date of manufacture

### PACKAGING

• 22L	Disposable Canister
• 108L	Returnable Canister
• 216L	Returnable Canister

## STORAGE

### HANDLING & STORAGE

- Consult Material 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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# Tensorgrip

## SAFETY DATA SHEET Tensorgrip C11 Polystyrene Foam Adhesive

### 1. Identification

#### Product identifier

Product name Tensorgrip C11 Polystyrene Foam Adhesive

#### Recommended use of the chemical and restrictions on use

Application Canister Spray Adhesive

#### Details of the supplier of the safety data sheet

Supplier Quin Global  
5710 F St  
(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

Aerosol 2 - H223, H229 Press. Gas, Compressed - H280

##### Health hazards

Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 STOT SE 3 - H335, H336

##### Environmental hazards

Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

##### 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

### Tensorgrip C11 Polystyrene Foam Adhesive

- H223 Flammable aerosol.
- H229 Pressurized container: may burst if heated.
- H280 Contains gas under pressure; may explode if heated.
- H302+H332 Harmful if swallowed or if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

- P261 Avoid breathing vapor/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P332+P313 If skin irritation occurs: Get medical advice/attention.

#### Contains

Dimethyl Ether, Heptane, Acetone

#### Other hazards

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

#### Other hazards

### 3. Composition/information on ingredients

#### Substances

#### Mixture Statement

#### Mixtures

<b>Dimethyl Ether</b>	<b>30-60%</b>
<b>CAS number:</b> 115-10-6 <b>REACH registration number:</b> 01-2119472128-37-XXXX	
<b>Classification</b>	
Flam. Gas 1 - H220	
Press. Gas, Liquefied - H280	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2B - H320	
STOT SE 3 - H335, H336	

**Tensorgrip C11 Polystyrene Foam Adhesive**

<b>Heptane</b>	<b>30-60%</b>
CAS number: 142-82-5 REACH registration number: 01-2119457603-38-XXXX M factor (Acute) = 1 M factor (Chronic) = 1	
<b>Classification</b> 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	
<b>Acetone</b>	<b>1-5%</b>
CAS number: 67-64-1	
<b>Classification</b> 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	

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.

**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.

## Tensorgrip C11 Polystyrene Foam Adhesive

### Inhalation

Prolonged or repeated exposure may cause the following adverse effects: Irritation of nose, throat and airway. Headache. Coughing. Sore throat.

### 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.

### Eye contact

Prolonged or repeated exposure may cause the following adverse effects: Irritation and redness, followed by blurred vision.

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## 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.

#### Hazardous combustion products

Thermal decomposition or combustion products may include the following substances: Very toxic gases or vapors. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### Advice for firefighters

#### Special protective equipment for firefighters

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

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## 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.

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## 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.

## Tensorgrip C11 Polystyrene Foam Adhesive

### 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 1.2.

### **8. Exposure Controls/personal protection**

#### **Control parameters**

#### **Occupational exposure limits**

#### **Dimethyl Ether**

Long-term exposure limit (8-hour TWA): WEEL:US.AIHA = Workplace Environmental Exposure Level Guides 1000 ppm

#### **Heptane**

Long-term exposure limit (8-hour TWA): ACGIH 400 ppm

Short-term exposure limit (15-minute): ACGIH 500 ppm

Long-term exposure limit (8-hour TWA): OSHA 500 ppm 2000 mg/m<sup>3</sup>

#### **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/m<sup>3</sup>

Ceiling exposure limit: NIOSH: National Institute of Occupational Safety and Health 250 ppm 590 mg/m<sup>3</sup> vapour

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

A4 = Not Classifiable as a Human Carcinogen.

#### **Heptane (CAS: 142-82-5)**

**Immediate danger to life and health**

750 ppm

#### **Acetone (CAS: 67-64-1)**

**Immediate danger to life and health**

2500 ppm

#### **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**

## Tensorgrip C11 Polystyrene Foam Adhesive

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.

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## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

#### Appearance

Aerosol.

#### Color

Clear. Blue.

#### Odor

Organic solvents.

#### Initial boiling point and range

-25°C/-13°F @ 1013.25 mbar

#### Flash point

~ -41°C/-42°F Not specified.

#### Upper/lower flammability or explosive limits

Lower flammable/explosive limit: 3.4 g/100 g Upper flammable/explosive limit: 18 g/100 g

#### Relative density

~ .738

#### Solubility(ies)

Negligibly soluble in water

#### Volatile organic compound

This product contains a maximum VOC content of 556.27 g/l.

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## 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 (CO2).

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## 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity - oral

##### ATE oral (mg/kg)

1,266.17539062

#### Acute toxicity - dermal

##### ATE dermal (mg/kg)

2785.58585935

#### Acute toxicity - inhalation



## Tensorgrip C11 Polystyrene Foam Adhesive

ATE inhalation (gases ppm)

10000.0

ATE inhalation (vapours mg/l)

27.85585859

### Toxicological information on ingredients.

#### Dimethyl Ether

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> gases ppmV)

308.5

Species

Rat

ATE inhalation (gases ppm)

4500

##### Carcinogenicity

Does not contain any substances known to be carcinogenic.

##### Specific target organ toxicity - single exposure

STOT - single exposure

May cause respiratory irritation. Central nervous system depression. Skin and eye irritation.

##### Aspiration hazard

No data available.

##### Medical Symptoms

Central nervous system depression. Frostbite. Respiratory system irritation. Skin irritation. Eye irritation.

## Tensorgrip C11 Polystyrene Foam Adhesive

### Heptane

#### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg)

5,000.0

Species

Rat

ATE oral (mg/kg)

500.0

#### Acute toxicity - dermal

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

2000.0

Species

Rabbit

ATE dermal (mg/kg)

1100

#### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)

29.3

Species

Rat

ATE inhalation (vapours mg/l)

11.0

#### Carcinogenicity

Does not contain any substances known to be carcinogenic.

#### Specific target organ toxicity - single exposure

STOT - single exposure

May cause drowsiness or dizziness

#### General information

Absorption of large quantities may cause: Narcosis. Death.

**Tensorgrip C11 Polystyrene Foam Adhesive****Acetone****Acute toxicity - oral****Acute toxicity oral (LD<sub>50</sub> mg/kg)**

5,800.0

**Species**

Rat

**ATE oral (mg/kg)**

500.0

**Acute toxicity - dermal****Acute toxicity dermal (LD<sub>50</sub> mg/kg)**

20000.0

**Species**

Rabbit

**ATE dermal (mg/kg)**

1100

**Acute toxicity - inhalation****Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l)**

76.0

**Species**

Rat

**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

**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**

**Tensorgrip C11 Polystyrene Foam Adhesive****Air transport notes** Cargo aircraft only. 75kg**UN Number****UN No. (DOT)** 3501**UN No. (ICAO)** 3501**UN proper shipping name****Proper shipping name (DOT)** 3501 - Chemical Under Pressure, Flammable, N.O.S. (Dimethyl Ether, Acetone)**Transport hazard class(es)****DOT hazard class** 2.1**Transport labels****Packing group**

Not applicable.

**15. Regulatory information****Inventories****US - TSCA**

Present

Dimethyl Ether

Heptane

Acetone

**16. Other information****Revision date** 2/12/2015**Revision** 1**Supersedes date** 8/11/2014**SDS No.** 20376**Hazard statements in full**

H223 Flammable aerosol.  
 H229 Pressurized container: may burst if heated.  
 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.  
 H320 Causes eye irritation.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H336 May cause drowsiness or dizziness.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.

**ACA HMIS Health rating.** Moderate hazard. (2)**ACA HMIS Physical hazard rating.** Normally stable. (0)

### Tensorgrip C11 Polystyrene Foam Adhesive

**ACA HMIS Personal protection rating.**

B

**ACA HMIS Flammability rating.**

Ignites easily. (3)

#### Disclaimer

The information in this Material Safety Data Sheet (MSDS) 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 manufacturer of this product is fit for a particular purpose and suitable for users' method of use or application. It is essential that the user evaluate this product, not the manufacturer, to determine whether it is fit for a particular purpose and suitable for users' method of use or application