

# Tensorgrip

## SAFETY DATA SHEET

### Tensorgrip P321 Polystyrene Foam Contact Adhesive

#### 1. Identification

##### Product identifier

**Product name** Tensorgrip P321 Polystyrene Foam 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 1 - H222 Press. Gas, Compressed - H280

**Health hazards** Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Repr. 2 - H361f STOT SE 3 - H335, H336 STOT RE 2 - H373

**Environmental hazards** Aquatic Chronic 2 - H411

**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

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<b>Hazard statements</b>	<p>H222 Extremely flammable aerosol.</p> <p>H280 Contains gas under pressure; may explode if heated.</p> <p>H302+H332 Harmful if swallowed or if inhaled.</p> <p>H315 Causes skin irritation.</p> <p>H319 Causes serious eye irritation.</p> <p>H335 May cause respiratory irritation.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H361f Suspected of damaging fertility.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>
<b>Precautionary statements</b>	<p>P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.</p> <p>P260 Do not breathe vapor/ spray.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 If on skin: Wash with plenty of water.</p> <p>P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.</p> <p>P308+P313 If exposed or concerned: Get medical advice/ attention.</p>
<b>Contains</b>	Dimethyl Ether, n-Hexane, Acetone

### Other hazards

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

### 3. Composition/information on ingredients

#### Mixtures

<p><b>Dimethyl Ether</b> <span style="float: right;"><b>30-60%</b></span></p> <p>CAS number: 115-10-6</p>
<p><b>Classification</b></p> <p>Flam. Gas 1 - H220</p> <p>Press. Gas, Liquefied - H280</p> <p>Acute Tox. 4 - H332</p> <p>Skin Irrit. 2 - H315</p> <p>Eye Irrit. 2B - H320</p> <p>STOT SE 3 - H335, H336</p>
<p><b>n-Hexane</b> <span style="float: right;"><b>30-60%</b></span></p> <p>CAS number: 110-54-3</p> <p>M factor (Acute) = 1</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>Skin Irrit. 2 - H315</p> <p>Eye Irrit. 2A - H319</p> <p>Repr. 2 - H361f</p> <p>STOT SE 3 - H336</p> <p>STOT RE 2 - H373</p> <p>Aquatic Chronic 2 - H411</p>

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<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 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.
<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.

#### Most important symptoms and effects, both acute and delayed

<b>General information</b>	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.
<b>Inhalation</b>	Prolonged or repeated exposure may cause the following adverse effects: Irritation of nose, throat and airway. Coughing. Headache. Sore throat.
<b>Ingestion</b>	Symptoms following overexposure may include the following: Gastrointestinal symptoms, including upset stomach. Nausea, vomiting. Diarrhea.
<b>Skin contact</b>	Prolonged contact may cause redness, irritation and dry skin.
<b>Eye contact</b>	Prolonged or repeated exposure may cause the following adverse effects: Irritation and redness, followed by blurred vision.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

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**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.

## 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)

**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

Dimethyl Ether

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

### n-Hexane

Long-term exposure limit (8-hour TWA): ACGIH 50 ppm

Sk

Ceiling Value: OSHA\_TRANS 500 ppm 1800 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): OSHA 50 ppm 180 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.

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 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

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.

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<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 3.4 g/100 g Upper flammable/explosive limit: 18 g/100 g
<b>Relative density</b>	.738
<b>Solubility(ies)</b>	Negligibly soluble in water
<b>Volatile organic compound</b>	This product contains a maximum VOC content of 568.34 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>Hazardous decomposition products</b>	Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).

### 11. Toxicological information

#### Information on toxicological effects

##### Acute toxicity - oral

ATE oral (mg/kg) 1,283.36755647

##### Acute toxicity - dermal

ATE dermal (mg/kg) 2,823.40862423

##### Acute toxicity - inhalation

ATE inhalation (gases ppm) 10,000.0

ATE inhalation (vapours mg/l) 28.23408624

#### 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) 4,500.0

##### Carcinogenicity

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

Aspiration hazard No data available.

**Medical Symptoms** Central nervous system depression. Frostbite. Respiratory system irritation. Skin irritation. Eye irritation.

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### n-Hexane

#### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 25,000.0

Species Rat

ATE oral (mg/kg) 500.0

#### Acute toxicity - dermal

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

Species Rabbit

ATE dermal (mg/kg) 1,100.0

#### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> 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 toxicity - 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.)) 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.

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<b>Eye contact</b>	Risk of corneal clouding.
<b>Route of exposure</b>	Inhalation Skin and/or eye contact
<b>Target Organs</b>	Eyes Skin Respiratory system, lungs Central nervous system Peripheral nervous system

### 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)** 20,000.0

**Species** Rabbit

**ATE dermal (mg/kg)** 1,100.0

#### 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 exposure** 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.



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### 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.

**Proper shipping name (DOT)** Chemical Under Pressure, Flammable, N.O.S.

**Transport hazard class(es)**

**DOT hazard class** 2.1

**Transport labels**



**Packing group**

Not applicable.

### 15. Regulatory information

**US Federal Regulations**

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

*n-Hexane*

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

*Acetone*

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

**SARA 313 Emission Reporting**

Present.

*n-Hexane*

**SARA (311/312) Hazard Categories**

Present.

*Dimethyl Ether*

Acute  
Health hazard  
Pressure  
Fire  
Hazard

*n-Hexane*

Acute  
Chronic  
Health hazard  
Fire

*Acetone*

Acute  
Chronic  
Health hazard  
Fire

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### US State Regulations

#### Massachusetts "Right To Know" List

Present.

*Dimethyl Ether*

*n-Hexane*

*Acetone*

#### Rhode Island "Right To Know" List

*Acetone*

Present.

#### Minnesota "Right To Know" List

Present.

*Dimethyl Ether*

*Acetone*

#### New Jersey "Right To Know" List

Present.

*Dimethyl Ether*

*n-Hexane*

*Acetone*

#### Pennsylvania "Right To Know" List

Present.

*Dimethyl Ether*

*n-Hexane*

*Acetone*

### Inventories

#### Canada - DSL/NDSL

Present.

*Dimethyl Ether*

*n-Hexane*

*Acetone*

#### US - TSCA

Present.

*Dimethyl Ether*

*n-Hexane*

*Acetone*

### 16. Other information

Revision date	11/15/2017
Revision	4
Supersedes date	4/3/2017
SDS No.	20374

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<b>Hazard statements in full</b>	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. H320 Causes eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. 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.
<b>ACA HMIS Health rating.</b>	Moderate hazard. (2)
<b>ACA HMIS Flammability rating.</b>	Ignites easily. (3)
<b>ACA HMIS Physical hazard rating.</b>	Normally stable. (0)
<b>ACA HMIS Personal protection rating.</b>	B



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