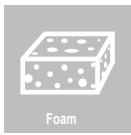


P311

NON-FLAM PRESSURE SENSITIVE ADHESIVE

DATA SHEET TensorGrip



As part of our **INDUSTRIAL** range, **P311** is a web spray adhesive designed for use in applications using the substrates listed.

PRODUCT DESCRIPTION

TensorGrip P311 is a medium pressure-sensitive adhesive, offering fast dry and excellent repositionability. This adhesive is the answer for temporary or permanent bonds.

ADVANTAGES

- Non-Flammable
- Low VOC
- Aggressive tack adhesive
- Fast coverage of large areas
- Long open assembly time
- Repositionable
- One or two sided application
- 80% of final strength achieved immediately
- Full strength achieved in 24 hours
- Also bonds polyethylene and other films
- Resistant to high temperatures when applied two-sided

DIRECTIONS FOR USE

- **TensorGrip P311** is designed as a portable, self-contained spray system for field or shop applications.
- Apply adhesive to one or both surfaces to be mated, at 80% to 100% coverage. Spraying both surfaces will result in a stronger, more permanent bond.
- 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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CHEMICAL TECHNICAL DATA

TYPICAL PROPERTIES

- Total Solids 22-28%
- VOC Content 0 g/L
- Color Blue, Clear
- System Flammability 100% Non-Flammable
- Solvent System Methylene Chloride
- Dry time 3-5 mins dependent on temp & humidity
- Open time Long
- Shelf Life 18 months from date of manufacture

PACKAGING

- 650 ml Aerosol Can
- 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 P311 Non-Flam Pressure Sensitive Adhesive

1. Identification

Product identifier

Product name Tensorgrip P311 Non-Flam Pressure Sensitive 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 Aerosol 3 - H229 Press. Gas, Compressed - H280

Health hazards Acute Tox. 3 - H301 Acute Tox. 4 - H312 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Carc. 2 - H351 STOT SE 3 - H335, H336 STOT RE 2 - H373

Environmental hazards Not Classified

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

Tensorgrip P311 Non-Flam Pressure Sensitive Adhesive

Hazard statements	<p>H280 Contains gas under pressure; may explode if heated.</p> <p>H301 Toxic if swallowed.</p> <p>H312 Harmful in contact with skin.</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>H351 Suspected of causing cancer.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p>
Precautionary statements	<p>P251 Pressurized container: Do not pierce or burn, even after use</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P308+P313 If exposed or concerned: Get medical advice/ attention.</p> <p>P405 Store locked up.</p> <p>P410+P403 Protect from sunlight. Store in a well-ventilated place.</p> <p>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.</p>
Contains	Methylene Chloride

Other hazards

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

3. Composition/information on ingredients

Mixtures

Methylene Chloride	60-100%
CAS number: 75-09-2	
Classification	
Acute Tox. 3 - H301	
Acute Tox. 4 - H312	
Skin Irrit. 2 - H315	
Eye Irrit. 2A - H319	
Carc. 2 - H351	
STOT SE 3 - H335, H336	
STOT RE 2 - H373	

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. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. 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	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. Get medical attention.
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.

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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.

Inhalation Irritating to respiratory system. Irritation of nose, throat and airway. Headache.

Ingestion Gastrointestinal symptoms, including upset stomach. Stomach pain. Nausea, vomiting. Diarrhea.

Skin contact Prolonged contact may cause redness, irritation and dry skin.

Eye contact May cause eye irritation. Prolonged contact may cause redness and/or tearing.

5. Fire-fighting measures

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.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO₂). Carbon monoxide (CO). Hydrocarbons. Aldehydes.

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.

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. 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 spilling. Avoid contact with skin and eyes. 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.

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 container tightly closed. Keep only in the original container. Pressurized container: Must not be exposed to temperatures above 50°C/120°F.

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8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

Methylene Chloride

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

A3

Short-term exposure limit (15-minute): OSHA 125 ppm

Long-term exposure limit (8-hour TWA): OSHA 25 ppm

ACGIH = American Conference of Governmental Industrial Hygienists.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

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. Provide adequate general and local exhaust ventilation.

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 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.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Aerosol. Liquid
Color	Clear. Blue.
Odor	Organic solvents.
Relative density	~ 1.22
Solubility(ies)	Negligibly soluble in water
Volatile organic compound	This product contains a maximum VOC content of 0 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.

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Materials to avoid May cause oxidation with: Aluminum.

Hazardous decomposition products Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Aldehydes. Hydrocarbons.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 145.81510645

Acute toxicity - dermal

ATE dermal (mg/kg) 1,603.9661709

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 16.03966171

Toxicological information on ingredients.

Methylene Chloride

Acute toxicity - oral

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

Species Rat

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

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

Species Rat

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 52.0

Species Rat

ATE inhalation (vapours mg/l) 11.0

Carcinogenicity

Carcinogenicity Cancinogenicity - rat - inhalation Limited evidence of carcinogenicity in animal studies

Target organ for carcinogenicity Tumerigenic: Carcinogenic by RTECS criteria. Endocrine: Tumors

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

NTP carcinogenicity Reasonably anticipated to be a human carcinogen.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness

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Specific target organ toxicity - repeated exposure

STOT - repeated exposure Inhalation - May cause damage to organs through prolonged or repeated exposure
 -Central nervous system Oral - May cause damage to organs through prolonged or repeated exposure
 -Liver, blood.

General information

RTECS: PA8050000

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 1. <75kg, 2. <150kg

UN Number

UN No. (TDG) 3500

UN No. (ICAO) 3500

UN No. (DOT) 3500

UN proper shipping name

Proper shipping name (TDG) Chemical Under Pressure, N.O.S. (Air, Compressed)

Proper shipping name (DOT) Chemical Under Pressure, N.O.S. (Air, Compressed)

Transport hazard class(es)

TDG class 2

TDG label(s) 2.2

Transport labels



Packing group

Not applicable.

15. Regulatory information

Inventories

US - TSCA

The following ingredients are listed or exempt:

Methylene Chloride

16. Other information

Revision date 12/9/2015

Revision 1

Tensorgrip P311 Non-Flam Pressure Sensitive Adhesive

Supersedes date	10/7/2015
SDS No.	21489
Hazard statements in full	H280 Contains gas under pressure; may explode if heated. H301 Toxic if swallowed. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer. H373 May cause damage to organs through prolonged or repeated exposure.
ACA HMIS Health rating.	Moderate hazard. (2)
ACA HMIS Flammability rating.	Will not burn. (0)
ACA HMIS Physical hazard rating.	Normally stable. (0)
ACA HMIS Personal protection rating.	B

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