

Tensorgrip

SAFETY DATA SHEET Tensorgrip P321 Polystyrene Adhesive

1. Identification

Product identifier

Product name Tensorgrip P321 Polystyrene 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 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

Warning

Hazard statements

Tensorgrip P321 Polystyrene 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.
- 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.

Precautionary statements

- P260 Do not breathe 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, n-Hexane, 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

Dimethyl Ether	30-60%
CAS number: 115-10-6 REACH registration number: 01-2119472128-37-XXXX	
Classification	
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 P321 Polystyrene Adhesive

n-Hexane	30-60%
CAS number: 110-54-3	
M factor (Acute) = 1	

Classification	
Flam. Liq. 2 - H225	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2A - H319	
Repr. 2 - H361f	
STOT SE 3 - H336	
STOT RE 2 - H373	
Aquatic Chronic 2 - H411	

Acetone	1-5%
CAS number: 67-64-1	

Classification	
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

Tensorgrip P321 Polystyrene Adhesive

of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation

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

Ingestion

Symptoms following overexposure may include the following: 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.

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 (CO₂).

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.

Tensorgrip P321 Polystyrene Adhesive

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 1.2.

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

n-Hexane

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

Sk

Ceiling Value: OSHA_TRANS 500 ppm 1800 mg/m³

Long-term exposure limit (8-hour TWA): OSHA 50 ppm 180 mg/m³

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/m³

Ceiling exposure limit: NIOSH: National Institute of Occupational Safety and Health 250 ppm 590 mg/m³ vapour

ACGIH = American Conference of Governmental Industrial Hygienists.

Sk = Danger of cutaneous absorption.

OSHA = Occupational Safety and Health Administration.

A4 = Not Classifiable as a Human Carcinogen.

n-Hexane (CAS: 110-54-3)

Immediate danger to life and health

1100 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.

Tensorgrip P321 Polystyrene Adhesive

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 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.

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 568.34 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.

Hazardous decomposition products

Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2).

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)

1,283.36755647

Acute toxicity - dermal

Tensorgrip P321 Polystyrene Adhesive**ATE dermal (mg/kg)**

2823.40862423

Acute toxicity - inhalation**ATE inhalation (gases ppm)**

10000.0

ATE inhalation (vapours mg/l)

28.23408624

Toxicological information on ingredients.**Dimethyl Ether****Acute toxicity - inhalation****Acute toxicity inhalation (LC₅₀ 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.

n-Hexane**Acute toxicity - oral****Acute toxicity oral (LD₅₀ mg/kg)**

25,000.0

Species

Rat

ATE oral (mg/kg)

500.0

Acute toxicity - dermal**Acute toxicity dermal (LD₅₀ mg/kg)**

2000.0

Species

Rabbit

ATE dermal (mg/kg)

1100

Acute toxicity - inhalation**Acute toxicity inhalation (LC₅₀ vapours mg/l)**

171.6

Species

Rat

Tensorgrip P321 Polystyrene Adhesive

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

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.)) Absorbtion 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.

Eye contact

Risk of corneal clouding.

Route of entry

Inhalation Skin and/or eye contact

Target Organs

Eyes Skin Respiratory system, lungs Central nervous system Peripheral nervous system

Tensorgrip P321 Polystyrene Adhesive**Acetone****Acute toxicity - oral****Acute toxicity oral (LD₅₀ mg/kg)**

5,800.0

Species

Rat

ATE oral (mg/kg)

500.0

Acute toxicity - dermal**Acute toxicity dermal (LD₅₀ mg/kg)**

20000.0

Species

Rabbit

ATE dermal (mg/kg)

1100

Acute toxicity - inhalation**Acute toxicity inhalation (LC₅₀ 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 P321 Polystyrene 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, Hexane)

Transport hazard class(es)

DOT hazard class 2.1

Transport labels



Packing group

Not applicable.

15. Regulatory information

Inventories

US - TSCA

Present

Dimethyl Ether

n-Hexane

Acetone

16. Other information

Revision date 8/11/2014

Revision 4

Supersedes date 8/11/2014

SDS No. 20374

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.
- 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.

ACA HMIS Health rating. Moderate hazard. (2)

Tensorgrip P321 Polystyrene Adhesive

ACA HMIS Physical hazard rating.	Normally stable. (0)
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