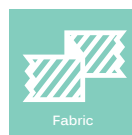
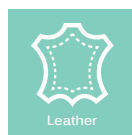


M88 GENERAL PURPOSE MARINE SPRAY ADHESIVE

DATA SHEET
TensorGrip



As part of our **MARINE** range, **M88** is a mist spray adhesive designed as a general purpose adhesive that can be used on many different substrates including foam, leather and fabric.

PRODUCT DESCRIPTION

TensorGrip® M88 is an industrial strength general purpose spray adhesive designed for permanent or temporary bonds. Perfect for marine seating and interior boat walls.

ADVANTAGES

- Temporary or permanent bonds
- Fast drying with excellent initial bond
- Multi-purpose so it works on a variety of substrates
- Mist spray virtually eliminates telegraphing

DIRECTIONS FOR USE

- **TensorGrip® M88** 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.
- 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.

QUIN GLOBAL US

5710 F ST, Omaha NE 68117

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

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M88 GENERAL PURPOSE MARINE SPRAY ADHESIVE

DATA SHEET
Tensorgrip

CHEMICAL TECHNICAL DATA

TYPICAL PROPERTIES

- Total Solids 25-31%
- VOC Content 340g/L
- Color Red, Clear
- System Flammability Flammable adhesive; Flammable propellant
- Solvent System Methyl Acetate
- Shelf Life 18 months from date of manufacture

PACKAGING

- 650ml Aerosol Cans
- 7L Disposable Canister
- 22L Disposable 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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SAFETY DATA SHEET

TensorGrip M88-AA General Purpose Marine Spray Adhesive

1. Identification

Product identifier

Product name TensorGrip M88-AA General Purpose Marine Spray Adhesive

Product number USA

Recommended use of the chemical and restrictions on use

Application Aerosol 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

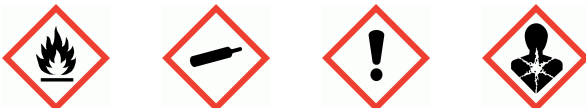
Health hazards Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 STOT SE 3 - H336 Asp. Tox. 1 - H304

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 Danger

Hazard statements H223 Flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

TensorGrip M88-AA General Purpose Marine Spray Adhesive

Precautionary statements

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.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P312 Call a poison center/doctor if you feel unwell.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Supplemental label information

AT(o) % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

Contains

Methyl Acetate, NAPTHA (PETROLEUM), HYDROTREATED LIGHT, Isobutane, Propane

Other hazards

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

3. Composition/information on ingredients

Substances

Mixtures

Methyl Acetate 30-60% CAS number: 79-20-9
Classification Flam. Liq. 2 - H225 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Eye Irrit. 2A - H319 STOT SE 3 - H336
Isobutane 10-30% CAS number: 75-28-5
Classification Flam. Gas 1 - H220 Press. Gas, Compressed - H280
Propane 10-30% CAS number: 74-98-6
Classification Flam. Gas 1 - H220 Press. Gas, Liquefied - H280 Acute Tox. 4 - H332 Simple Asphyxiant - USH03

The Full Text for all Hazard Statements are Displayed in Section 16.

4. First-aid measures

Description of first aid measures

TensorGrip M88-AA General Purpose Marine Spray Adhesive

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. Wash skin thoroughly with soap and water. Remove contaminated clothing. 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.
Inhalation	Prolonged or repeated exposure may cause the following adverse effects: Irritation of nose, throat and airway. Coughing. Headache.
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.

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. Vapors are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. 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: Hydrocarbons Aldehydes. 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

TensorGrip M88-AA General Purpose Marine Spray Adhesive

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. No smoking, sparks, flames or other sources of ignition near spillage. Avoid the spillage or runoff entering drains, sewers or watercourses. Eliminate all sources of ignition. Wash thoroughly after dealing with a spillage. Absorb in vermiculite, dry sand or earth and place into containers. Provide adequate ventilation.

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 1.2.

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/m³

Isobutane

Long-term exposure limit (8-hour TWA): ACGIH 1000 ppm

Long-term exposure limit (8-hour TWA): NIOSH: National Institute of Occupational Safety and Health 800 ppm 1900 mg/m³

Propane

Long-term exposure limit (8-hour TWA): NIOSH: National Institute of Occupational Safety and Health 1800 mg/m³ 1000 ppm

Long-term exposure limit (8-hour TWA): OSHA 1800 ppm 1000 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

Exposure controls

TensorGrip M88-AA General Purpose Marine Spray Adhesive

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! Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. Wash promptly with soap and water if skin becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Aerosol.
Color	Red.
Odor	Strong.
Flash point	~ -104°C/-156°F
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.8 g/100 g Upper flammable/explosive limit: 18 g/100 g
Vapour density	> 1
Relative density	~ .852
Solubility(ies)	Negligibly soluble in water
Volatile organic compound	This product contains a maximum VOC content of 340 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. Reducing agents. Avoid contact with the following materials: Oxidizing agents.
Hazardous decomposition products	Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO ₂). Hydrocarbons.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	1,414.26242055
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TensorGrip M88-AA General Purpose Marine Spray Adhesive

Acute toxicity - dermal

ATE dermal (mg/kg) 3,660.44391202

Acute toxicity - inhalation

ATE inhalation (gases ppm) 30,000.0

ATE inhalation (vapours mg/l) 24.4167721

Toxicological information on ingredients.

Methyl Acetate

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

ATE oral (mg/kg) 500.0

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) 49.28

Species Rat

ATE inhalation (vapours mg/l) 11.0

Isobutane

Toxicological effects No information available.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

Inhalation Suffocation (asphyxiant) hazard

Skin Contact Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin.

Eye contact Spray will evaporate and cool quickly and may cause frostbite or cold burns if in contact with skin.

Propane

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ gases ppmV) 1,442.0

Species Rat

TensorGrip M88-AA General Purpose Marine Spray Adhesive

Acute toxicity inhalation (LC₅₀ vapours mg/l) 1,442.0

Species Rat

ATE inhalation (gases ppm) 4,500.0

ATE inhalation (vapours mg/l) 11.0

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. (DOT) Limited Quantity <1L, Aerosol

UN No. (ICAO) 1950

UN proper shipping name

Proper shipping name (DOT) Aerosols, Flammable (Methyl Acetate, Hexane)

Proper shipping name (IMDG) CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S.

Proper shipping name (ICAO) 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

Inventories

US - TSCA
Present.

16. Other information

Revision date 4/11/2016

Revision 2

TensorGrip M88-AA General Purpose Marine Spray Adhesive

Supersedes date	4/5/2016
SDS No.	21587
Hazard statements in full	H223 Flammable aerosol. H225 Highly flammable liquid and vapor. H280 Contains gas under pressure; may explode if heated. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. 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. USH03 May displace oxygen and cause rapid suffocation
ACA HMIS Health rating.	Slight hazard. (1)
ACA HMIS Flammability rating.	Ignites easily. (3)
ACA HMIS Physical hazard rating.	Normally stable. (0)
ACA HMIS Personal protection rating.	B

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