



Revision Number:

Issue date: 04/28/2021

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:FusiONProduct type/use:AdhesiveRestriction of Use:None idenCompany address:True Tape, LLC.3125 Maple LnCanon City, CO 81212

FusiON Adhesive None identified

Region:United StatesContact information:

Telephone: USA: 1-800-535-5053 Outside the USA: 1-352-323-3500 TRANSPORT EMERGENCY Phone: INFOTRAC

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW		
DANGER:	HIGHLY FLAMMABLE LIQUID AND VAPOR.	
	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.	
	CAUSES SKIN IRRITATION.	
	CAUSES SERIOUS EYE IRRITATION.	
	MAY CAUSE DROWSINESS OR DIZZINESS.	
	SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.	
	MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR	
	REPEATED EXPOSURE.	

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	2
SKIN IRRITATION	2
EYE IRRITATION	2A
REPRODUCTIVE TOXICITY	2
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2
ASPIRATION HAZARD	1

PICTOGRAM(S)



Precautionary Statements

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, clothing, eye and face protection.

Response:	IF SWALLOWED: Immediately call a physician or poison control center. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. Do NOT induce vomiting. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.
Storage:	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal:	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*	
Ethyl acetate	141-78-6	10 - 20	
Toluene	108-88-3	10 - 20	
Mix Heptane, branched, cyclic and linear /Naphtha (petroleum), hydrotreated light / Solvent naphtha (petroleum), light aliph.		5 - 10	
n-Hexane	110-54-3	5 - 10	
2-Propanol	67-63-0	1 - 5	
pentane-2,4-dione	123-54-6	1 - 5	
3-methylpentane	96-14-0	1 - 5	
Methylcyclopentane	96-37-7	1 - 5	

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES			
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.		
Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention.		
Eye contact:	Check for and remove any contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.		
Ingestion:	If material is ingested, immediately contact a physician or poison control center. DO NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs, prevent aspiration by keeping the patient's head below the knees. Never give anything by mouth to an unconscious person.		
Symptoms:	See Section 11.		
5. Fl	IRE FIGHTING MEASURES		
Extinguishing media:	Use extinguishing measures appropriate to local circumstances and the surrounding environment. Water spray (fog), foam, dry chemical or carbon dioxide.		
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Isolate area. Keep unnecessary personnel away.		

Unusual fire or explosion hazards:

Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

Hazardous combustion products:

Irritating and toxic gases or fumes may be released during a fire. Oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system.
Clean-up methods:	Isolate area. Keep unnecessary personnel away. Eliminate all ignition sources (flames, hot surfaces, and sources of electrical, static or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams and groundwater with spilled material or used absorbent.

7. HANDLING AND STORAGE

Handling:	Make sure containers are properly grounded before use or transfer of material. Keep container closed. Do not breathe gas/fumes/vapor/spray. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not taste or swallow. Do not handle or store near an open flame, heat or other sources of ignition. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode.
Storage:	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. Ground and bond metal containers for liquid transfer to avoid static sparks.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Ethyl acetate	400 ppm TWA	400 ppm (1,400 mg/m3) PEL	None	None
Toluene	20 ppm TWA	200 ppm TWA 300 ppm Ceiling 500 ppm MAX. CONC 10 minutes	None	None
Mix Heptane, branched, cyclic and linear /Naphtha (petroleum), hydrotreated light / Solvent naphtha (petroleum), light aliph.	None	None	None	None
n-Hexane	50 ppm TWA (SKIN)	500 ppm (1,800 mg/m3) PEL	None	None
2-Propanol	200 ppm TWA 400 ppm STEL	400 ppm (980 mg/m3) PEL	None	None
pentane-2,4-dione	25 ppm TWA (SKIN)	None	None	None
3-methylpentane	1,000 ppm STEL 500 ppm TWA	None	None	None
Methylcyclopentane	None	None	None	None

Engineering controls:

Work should be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the PEL and other relevant standards). Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.

Respiratory protection:

Do not inhale vapors and fumes. Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

be used if the potential for splashing or spraying of product exists.

Eye/face protection:

Skin protection:

Use impermeable gloves and protective clothing as necessary to prevent skin contact. Safety showers and eye wash stations should be available.

Safety goggles or safety glasses with side shields. Full face protection should

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: **Evaporation rate:** Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature:

Viscous Liquid Clear to Amber Hydrocarbon-like Not available. Not applicable Not available. > 60 - < 100 °C (> 140°F - < 212°F) Not available. 0.85 Not available. -10.00 °C (14°F) Setaflash Closed Cup 2.2 % (Ethyl acetate) 11 % (Ethyl acetate) Not available. Not applicable Not available. Not available. Not available. 55.23 % (calculated) 700 - 2,100 mPa.s Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Hazardous reactions:	None expected.
Hazardous decomposition products:	Irritating and toxic gases or fumes may be released during a fire. Oxides of carbon.
Incompatible materials:	Strong acids, alkalies and oxidizing agents.
Reactivity:	This product may react with strong acids, bases and oxidizing agents.
Conditions to avoid:	Heat, flames, sparks and other sources of ignition. Take measures to prevent the build-up of electrostatic charges.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation:	Causes respiratory tract irritation. The solvent vapors can be harmful and cause headache, nausea, and intoxication. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Chronic exposure to toluene may have effects on the central nervous system and these effects may progress to be irreversible. Intentional misuse of toluene has resulted in reproductive effects including physical and developmental abnormalities.
Skin contact:	Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause allergic skin reaction in susceptible individuals.
Eye contact: Ingestion:	Causes eye irritation. Prolonged eye contact may cause severe eye damage. Not expected under normal conditions of use. May cause gastrointestinal tract irritation if swallowed. Aspirated material can enter the lungs and result in pneumonitis. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Ethyl acetate	Oral LD50 (Rat) = 5.6 g/kg Oral LD50 (Mouse) = 0.44 g/kg	Blood, Central nervous system, Irritant
Toluene	Oral LD50 (Rat) = 2.6 g/kg Dermal LD50 (Rabbit) = 12,124 mg/kg	Behavioral, Cardiac, Central nervous system, Developmental, Ear, Irritant
Mix Heptane, branched, cyclic and linear /Naphtha (petroleum), hydrotreated light / Solvent naphtha (petroleum), light aliph.	None	No Data
n-Hexane	Oral LD50 (Rat) = 28,710 mg/kg Dermal LD50 (Rabbit) = > 2,000 mg/kg	Developmental, Irritant, Lung, Nervous System, Reproductive
2-Propanol	Oral LD50 (Rat) = 5,045 mg/kg Oral LD50 (Mouse) = 3,600 mg/kg Oral LD50 (Rabbit) = 6,410 mg/kg Oral LD50 (Rat) = 4.7 g/kg Oral LD50 (Mouse) = 4.5 g/kg Oral LD50 (Rabbit) = 8.0 g/kg Oral LD50 (Rabbit) = 5.03 g/kg Dermal LD50 (Rabbit) = 12,800 mg/kg	Allergen, Central nervous system, Irritant
pentane-2,4-dione	Oral LD50 (Rat) = 1,000 mg/kg Oral LD50 (Mouse) = 951 mg/kg Oral LD50 (Rat) = 55 mg/kg Oral LD50 (Rat) = 760 mg/kg Oral LD50 (Rat) = 570 mg/kg Dermal LD50 (Rabbit) = 1,370 mg/kg Dermal LD50 (Rabbit) = 790 mg/kg	Central nervous system, Corrosive, Developmental, Immune system, Irritant, Mutagen, Reproductive
3-methylpentane	None	Blood, Cardiac, Central nervous system, Irritant, Kidney
Methylcyclopentane	None	Irritant, Nervous System

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ethyl acetate	No	No	No
Toluene	No	No	No
Mix Heptane, branched, cyclic and linear /Naphtha (petroleum), hydrotreated light / Solvent naphtha (petroleum), light aliph.	No	No	No
n-Hexane	No	No	No
2-Propanol	No	No	No
pentane-2,4-dione	No	No	No
3-methylpentane	No	No	No
Methylcyclopentane	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information:

No specific studies have been conducted by True Tape on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, ground water, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:

Legal disposition of wastes is the responsibility of the owner/generator of the waste. Applicable federal, state and/or local regulations must be followed during treatment, storage, or disposal of waste containing this product. Empty containers must be handled with care due to product residue.

Hazardous waste number:

D001: Ignitable.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Adhesives
3
UN 1133
11
Toluene, Ethyl acetate
Adhesives
3
UN 1133
II
ADHESIVES (Heptanes)
3
UN 1133
II
Heptanes

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.
TSCA 12 (b) Export Notification:	2,4-Pentanedione (CAS# 123-54-6).
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312:	None above reporting de minimis. Fire, Immediate Health, Delayed Health

CERCLA/SARA Section 313: CERCLA Reportable quantity:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Toluene (CAS# 108-88-3). n-Hexane (CAS# 110-54-3). Ethyl acetate (CAS# 141-78-6) 5,000 lbs. (2,270 kg) Toluene (CAS# 108-88-3) 1,000 lbs. (454 kg)
California Proposition 65:	This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. This product contains a chemical known in the State of California to cause cancer.
Canada Regulatory Information	
CEPA DSL/NDSL Status:	One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2, 3 and related sections

Prepared by: Product Safety and Regulatory Affairs

Issue date: 12/30/2019

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, True Tape and its affiliates do not assume responsibility for any results obtained by persons over whose methods True Tape has no control. It is the user's responsibility to determine the suitability of True Tape's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any True Tape's products. In light of the foregoing, True Tape specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of True Tape's products. True Tape further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

This Safety Data Sheet has been generated based on OSHA Hazard Communication Standard (29 CFR 1910.1200) and provides information in accordance with U.S. federal law only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export.