



1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product ID: Thixon 422
Generic Description: Resin/solvent solution
Product Use: Adhesive

For customer service/technical information, contact:
Morton Adhesives & Chemical Specialties
10 South Electric Street
West Alexandria OH 45381
800-348-8846

HAZARD RATINGS		
	HMIS	NFPA
Health	2 *	2
Fire	3	3
Reactivity	0	0
* = Chronic		

MSDS prepared by:
Toxicology and Regulated Substance Compliance
David Wienckowski, D.A.B.T.
100 N. Riverside Plaza
Chicago IL 60606
312-807-3422

ChemTrec Emergency
1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS #	Approximate % (w/w)
Ethyl alcohol	64-17-5	35.3
Xylene	1330-20-7	27.9
Methyl ethyl ketone	78-93-3	13.3
Ethyl benzene	100-41-4	7.0
Non-hazardous and other ingredients below reportable levels	Proprietary	Balance

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: FLAMMABLE LIQUID AND VAPOR. CAUSES SEVERE EYE IRRITATION. CAUSES SEVERE DIGESTIVE TRACT IRRITATION. INHALATION MAY CAUSE DIZZINESS, HEADACHE AND INCOORDINATION. INGESTION CAN CAUSE DIZZINESS, FAINTNESS, HEADACHE AND INCOORDINATION. INGESTION MAY CAUSE INFLAMMATION OF THE LUNGS. MAY CAUSE RESPIRATORY TRACT IRRITATION. INGESTION MAY CAUSE NAUSEA, VOMITING, PAIN, UPSET STOMACH, DIARRHEA. INHALATION MAY CAUSE NAUSEA, VOMITING, UPSET STOMACH. MAY CAUSE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. See sections 3, 5, & 6.

PRIMARY ROUTES OF EXPOSURE: Eye. Skin. Inhalation (breathing).

EYE CONTACT: Causes severe irritation. May cause corneal opacity (clouding of the eye surface). Can cause burning sensation, tearing, and redness.

SKIN CONTACT: May cause slight to mild irritation. Prolonged or repeated contact may dry the skin and lead to irritation (i.e. dermatitis). May be absorbed through the skin. Can cause redness, itching, and burning sensation.

INHALATION (Breathing): Irritating to the eyes, nose, and respiratory tract.



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Can cause dizziness, headaches, and incoordination. Nausea, vomiting, and stomach upset can occur. Can cause anesthetic and/or narcotic effects.

INGESTION (Swallowing): Severely irritating to the mouth, throat, and stomach. May be harmful if swallowed. May cause nausea, vomiting, pain, and stomach upset (e.g., diarrhea). Can cause dizziness, faintness, headache, and incoordination. Possible aspiration hazard. May cause inflammation of the lungs.

TARGET ORGANS/CHRONIC EFFECTS: Liver. Kidneys. Nervous system. Lungs and respiratory system. Eyes. Skin.

CONDITIONS AGGRAVATED BY EXPOSURE: Liver. Kidneys. Nervous system. Lungs and respiratory system. Skin.

CARCINOGENICITY:

Table with 5 columns: Substance, ACGIH, IARC, NTP, OSHA. Rows include Ethyl alcohol, Xylene, Methyl ethyl ketone, and Ethyl benzene.

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Get prompt medical attention.

SKIN CONTACT: Immediately flush with water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Professionally wash clothing and shoes before re-use.

INHALATION (Breathing): Remove to fresh air. If symptoms develop, seek immediate medical attention. If not breathing, give artificial respiration.

INGESTION (Swallowing): Seek medical attention. Immediately induce vomiting, as directed by medical personnel. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIANS: Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

5. FIRE FIGHTING METHODS

Flash Point...: 20F -6.6C Method.....: Setaflash Closed Cup
Explosive Lmts: LEL(%) 1.2 UEL(%) Not Determined
Autoignition...: Not Determined

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Smoke, soot, and toxic/irritating fumes (i.e., carbon dioxide, carbon monoxide, etc.). Formaldehyde and/or other aldehydes.

FIRE AND EXPLOSION HAZARDS: High temperatures can cause sealed containers to rupture due to a build up of internal pressure. Cool with water. Vapors can travel to a source of ignition (flame, electric motor, hot surface, cigarette, etc.) and flash back. During a fire, irritating and highly toxic gases may be generated during combustion or decomposition.

EXTINGUISHING MEDIA: Water may be ineffective. SMALL FIRES: Dry chemical, carbon dioxide, halon, water spray, or foam. LARGE FIRES: Water spray, fog,



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or alcohol foam.

FIRE FIGHTING PROCEDURES/EQUIPMENT: Fire fighters and others exposed to the products of combustion should be equipped with positive pressure self-contained breathing apparatus (SCBA) and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

EVACUATION: Isolate hazard area. Keep unnecessary and unauthorized personnel from entering. Eliminate all sources of ignition.

CONTAINMENT: Safely stop discharge. Contain material, and erect dike or barrier. Stop material from contaminating soil, sewers or bodies of water.

CLEAN-UP/PERSONAL PROTECTION EQUIPMENT: Appropriate safety and protective equipment should be used. Use supplied air respirator or self-contained breathing apparatus in enclosed spaces or confined areas. Limits can be exceeded. See Section 8.

COLLECTION AND DISPOSAL: Stop discharge, if safe to do so. Use protective equipment. Use non-sparking tools and/or explosion-proof equipment. Stop ignition sources. Cover spills with absorbent sawdust and place in closed chemical waste containers. Dispose in accordance with applicable local, state and federal regulations.

REPORTING: Spills of this material in excess of a component listed below should be reported to the National Response Center (1-800-424-8802) or appropriate state and local emergency response organization:

Xylene	RQ
Methyl ethyl ketone	RQ
Ethyl benzene	RQ

7. HANDLING AND STORAGE

Storage Temperature 140F 60C

STORAGE CONDITIONS: Store in cool, dry, well ventilated area away from ignition sources, and direct sunlight. Keep containers tightly closed.

WARNING: Hot organic chemical vapors or mists can suddenly combust when mixed with air. Ignition can occur at typical ambient temperature process conditions. Any use in such processes should be done thoroughly to assure safe operating conditions.

TRANSFER: Containers should be supported and grounded before dispensing, mixing, pouring, and emptying. Open with non-flammable gas. If container is warm, open bung slowly to release internal pressure.

PERSONAL HYGIENE: Wash thoroughly after handling, especially before drinking, smoking, and using restroom facilities. Wash face, hands, and gloves. Professionally launder contaminated clothing for re-use.

EMPTY CONTAINER PRECAUTIONS: Attention! This container may contain residual product. Follow label warnings even after container is emptied since it may retain product residues. Do not use heat, sparks, or open flames, cigarettes on or near empty container. Do not reuse empty container for professional cleaning for food, clothing, or products for food contact.

consumption or where skin contact can occur.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

ACGIH - TLV

Ethyl alcohol	1000 ppm
Xylene	100 ppm
Methyl ethyl ketone	200 ppm
Ethyl benzene	100 ppm

ACGIH - STEL

Xylene	150 ppm
Methyl ethyl ketone	300 ppm
Ethyl benzene	125 ppm

OSHA - PEL

Ethyl alcohol	1000 ppm
Xylene	100 ppm
Methyl ethyl ketone	200 ppm
Ethyl benzene	100 ppm

OSHA - STEL

Xylene	150 ppm
Methyl ethyl ketone	300 ppm
Ethyl benzene	125 ppm

ENGINEERING CONTROLS/VENTILATION: Local exhaust ventilation is recommended when vapors, mists, or dusts can be released in excess of established air exposure limits (TLVs or PELs).

EYE PROTECTION: Wear chemical splash goggles. An eye wash facility should be readily available.

SKIN PROTECTION: Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, consult glove manufacturer to determine the proper type for a specific operation.

RESPIRATORY PROTECTION: Avoid breathing vapor and/or mists. Wear NIOSH/MSHA-approved equipment. Determine the appropriate type by consulting the respirator manufacturer. High airborne concentrations may necessitate use of self-contained breathing apparatus (SCBA) or a supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR 1910.134.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance.....: Colorless	Odor.....: Solvent
Physical State: Liquid	Solubility....: Insoluble
pH.....: Not Applicable	Boiling Point.: 147F 63.8C
Vapor Pressure: Not Determined	Vapor Density.: Not Determined
Evaporation Rt: Not Determined	VOC Material..: 735 g/L 6.1 lbs/gal
Specific Grvty: 0.88	%Non-Vol(w/w)..: 18

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

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CHEMICAL STABILITY: Stable under normal conditions of use.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: High temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizers. Acids.

11. TOXICITY INFORMATION

COMPONENTS:

Ethyl alcohol:

Fetal abnormalities have been reported in studies with cause liver and kidney injury.

Oral LD50	Rat	7,
	Mouse	3,
	Guinea pig	5,
Inhalation LC50	Rat	20,
	Mouse	39,

Xylene:

Oral LD50	Rat	4,
Inhalation LC50	Rat	5,

Methyl ethyl ketone:

Oral LD50	Rat	2,
	Mouse	4,
Dermal LD50	Rabbit	6,
Inhalation LC50	Mouse	40,
	Rat	23,

Ethyl benzene:

In 2-year inhalation studies, there was "clear evidence activity" of ethylbenzene in male rats based on increased tubule neoplasms and testicular adenoma. There was "some carcinogenic activity" in female rats based on renal tubule neoplasms. There was "some evidence of carcinogenic activity" in male mice based on increased incidences of alveolar/bronchiolar neoplasms and in female mice based on increased incidences of hepatocellular neoplasms.

Oral LD50	Rat	3,
Dermal LD50	Rabbit	17,

12. ECOLOGICAL INFORMATION

No data are available on this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL: When a decision is made to discard this material, it must meet RCRA's characteristic definition of ignitability.

GENERAL STATEMENTS: Federal regulations may apply to this material and/or local regulations may be different.

GENERAL RECOMMENDATIONS: Of the methods of disposal currently recommended, (1) incinerate at an authorized facility in order of preference, based upon environmental acceptability; (2) rework, if feasible; (3) incinerate at an authorized facility; (4) an acceptable waste treatment facility.



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SPECIAL INSTRUCTIONS: Be sure to contact the appropriate government environmental agencies if further guidance is required.

14. TRANSPORT INFORMATION

Weight (lb) Shipping Name Adhesives 49 C Y

DOT Label.....: Flammable Liquid UN/NA Id Num...: UN 1133
DOT Label No...: L152-1
Hazard Class...: 3 (IATA/49CFR) 3.2 (IMO)
Packing Group...: II WHMIS Label...: F152-1

15. REGULATORY INFORMATION

FEDERAL:

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III - Section 311/312 - Hazard Categories:
Y- Fire Hazard
N- Sudden Release of Pressure Hazard
N- Reactivity Hazard
Y- Immediate (acute) Health Hazard
Y- Delayed (chronic) Health Hazard

Ozone-Depleting Chemicals - No regulated ingredients.

SARA Section 302 Extremely Hazardous Mat - No regulated ingredients

SARA Section 313 Toxic Chemicals
Xylene
Methyl ethyl ketone
Ethyl benzene

TSCA Section 8(d) Data Reporting Rule
Methyl ethyl ketone
Ethyl benzene

STATE RIGHT-TO-KNOW:

Pennsylvania - New Jersey R-T-K
Ethyl alcohol 64-17-5
Xylene 1330-20-7
Environmental Hazard.
Methyl ethyl ketone 78-93-3
Environmental Hazard.
Ethyl benzene 100-41-4
Environmental Hazard.
Non-hazardous trade secret ingredient(s) Proprietary

California - California Proposition 65
WARNING: This product contains a chemical(s) known to the State of California to cause cancer.
Formaldehyde 50-00-0
Cancer Hazard.
* Trace = present at less than 0.01 percent.



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CONEG - No data available.

CANADA:

This is a "controlled product" under the Canadian Workplace Hazardous Materials Information System (WHMIS).

Class B Division 2

Class D Division 2 Sub-division B

CEPA - NPRI

Xylene
Methyl ethyl ketone
Ethyl benzene

Canadian Chemical Inventory

Domestic Substance List
Listed.

16. OTHER INFORMATION

USERS RESPONSIBILITY: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions - in addition to those described herein - are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

DISCLAIMER OF LIABILITY: The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

End of Material Safety Data Sheet