

CHEMTHANE 3725 PART B

1 PRODUCT AND COMPANY IDENTIFICATION

Supplier Details: Chemline Incorporated
5151 Natural Bridge Road
Saint Louis

Emergency: CHEMTREC 800-262-8200 (24 HOUR SERVICE)
Phone: 314-664-2230
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2 HAZARDS IDENTIFICATION

Classification of the substance or mixture**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):**

Health, Specific target organ toxicity - Repeated exposure, 1
Health, Skin corrosion/irritation, 2
Health, Serious Eye Damage/Eye Irritation, 2 A
Health, Specific target organ toxicity - Single exposure, 3
Health, Acute toxicity, 5 Dermal
Health, Acute toxicity, 5 Inhalation
Environmental, Hazards to the aquatic environment - Chronic, 3

GHS Label elements, including precautionary statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:**GHS Hazard Statements:**

H372 - Causes damage to organs through prolonged or repeated exposure
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H313 - May be harmful in contact with skin
H333 - May be harmful if inhaled
H412 - Harmful to aquatic life with long lasting effects

GHS Precautionary Statements:

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+352 - IF ON SKIN: Wash with soap and water.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.



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- P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P308+313 - IF exposed or concerned: Get medical advice/attention.
- P332+313 - If skin irritation occurs: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P403+233 - Store in a well ventilated place. Keep container tightly closed.
- P403+235 - Store in a well ventilated place. Keep cool.
- P405 - Store locked up.
- P501 - Dispose of contents/container to a licensed waste disposal facility.

Hazards not otherwise classified (HNOC) or not covered by GHS

- Route of Entry:** Inhalation; Skin; Eyes;
- Target Organs:** Eyes; Respiratory system; Skin;
- Inhalation:** Due to the low vapor pressure of the major components used in this product, it is unlikely that inhalation exposure will occur when handling this product under normal working conditions and at room temperature. However, during heating, spray application or processing of this product, it is possible that an exposure could occur. This product as a whole may then be expected to cause irritation of the upper respiratory tract and mucous membranes of the mouth, nose and throat. Symptoms may include coughing, headache, nausea, vomiting, and chest pain. This product contains an aromatic diamine, diethyltoluenediamine, inhalation exposure can cause methemoglobinemia with symptoms of cyanosis, a purplish-blue color of the skin, fingernails and lips.
- Skin Contact:** Upon contact, irritation and defatting of the skin are possible. The hindered amine and aliphatic amine components are considered to be fairly strong skin sensitizers and may cause an allergic skin reaction. The diethyltoluenediamine (DETDA) component of this product is fat-soluble and can penetrate the skin. Based on animal tests, DETA is expected to be toxic. Skin contact and skin absorption of DETA can cause methemoglobinemia with symptoms of cyanosis, a purplish-blue color of the skin, fingernails and lips. Contact can cause irritation with redness, and severe swelling and blistering.
- Eye Contact:** This product as a whole can cause severe irritation to the eyes. Diethyltoluenediamine (DETDA) is considered severely irritating and corrosive to the eyes. The vapors have also been reported to cause transient fogging of the eyes as a result of corneal edema.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
872-50-4	0-1%	1-Methyl-2-pyrrolidone
0	30-50%	Aspartic ester, trade secret
13463-67-7	25-40%	Titanium dioxide
7631-86-9	1-5%	Silica
1318-02-1	1-5%	Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites)

4 FIRST AID MEASURES

- Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult or bluish discoloration of ear lobes, lips or fingernails is visible, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility immediately.
- Skin Contact:** Remove all contaminated clothing and shoes immediately. Wash affected areas, including hair, beneath nails and other concealed areas with Polyethylene Glycol 400. Repeat washing with soap and water. If



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polyethylene Glycol 400 is not available, wash immediately with soap and plenty of cold water. DO NOT use hot water. Get medical attention immediately. Thoroughly clean clothing and shoes before reuse.

- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes. Use fingers to insure that eyelids are separated and that the eye is being irrigated. Get medical attention immediately.
- Ingestion:** Ingestion is not likely route of exposure, but if ingested, consult a physician. DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Should vomiting occur keep head below hip level to prevent aspiration of fluid into the lungs.

5 FIRE FIGHTING MEASURES

- Flash Point:** 342 °F (172.2 °C)
Flash Point Method: Pensky-Martens Closed Cup (ASTM D-93)
Autoignition Temp: Not established

Extinguishing media: Water; Carbon Dioxide; Dry Chemical; Foam:

Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters. Use cold water spray to cool fire-exposed containers to minimize risk of rupture. Material supports combustion. During a fire, irritating and toxic gases such as carbon monoxide may be generated by thermal decomposition or combustion. DO NOT spray fire directly. A solid stream of water directed into the hot burning liquid could cause frothing.

6 ACCIDENTAL RELEASE MEASURES

Remove all sources of flames, heating elements, gas engines, etc. Emergency clean-up personnel should wear self-contained breathing apparatus and protective clothing. If material is released or spilled, dam up to prevent spreading and contamination of surface waters, ground waters and drinking supplies. Notify local health authorities and other appropriate agencies if such contamination should occur. Spilled material should be contained and pumped into steel containers for recovery or disposal. Vermiculite absorbent should be spread over the spill area to absorb as much of the remaining product as possible. Scoop up solid absorbent for waste disposal. Ventilate area to remove the remaining vapors

7 HANDLING AND STORAGE

- Handling Precautions:** Handling: Avoid skin and eye contact. Use personal protective equipment when transferring material to or from drums, totes or other containers. If contamination with isocyanates is suspected, do not reseal containers. Do not smoke or use naked lights, open flames, space heaters, or other ignition sources near pouring, frothing or spraying operations
Special Emphasis for Spray Applications of Mixed Products Containing Isocyanates: Inspect the application area for the potential to expose other persons or for overspray to drift onto buildings, vehicles or other property. When spraying building exteriors, persons entering or exiting the building as well as those inside could be exposed to polyisocyanates due to wind conditions, open windows or air intakes. Do not begin application work until these potential problems have been corrected.
- Storage Requirements:** Storage: When stored between 15° and 30°C (60° and 85°F) in a dry area in sealed containers, typical shelf life is 6 months or more from the date of manufacture. Consult technical data sheet for shelf life requirements affecting performance quality. Opened containers must be handled properly to prevent moisture pickup.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering Controls:** Safety showers and eyewash stations should be easily accessible to the work area. Local exhaust ventilation is mandatory when working with this product.
- Personal Protective Equipment:** HMIS PP, H | Splash Goggles, Gloves, Apron, Vapor Respirator



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Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

1-Methyl-2-pyrrolidone (872-50-4)

Components with workplace control parameters

TWA	10 ppm	USA. Workplace Environmental Exposure Levels (WEEL)
Skin		

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pigmented liquid	Odor:	slightly musty
Physical State:	liquid	Solubility:	partially soluble in water
Odor Threshold:	No data available	Freezing/Melting Pt.:	Not established
Spec Grav./Density:	1.0279 @ 77°F (25°C)	Flash Point:	342.0°F (172.2°C)
Viscosity:	No data available	Vapor Density:	Not established
Boiling Point:	Not established	Auto-Ignition Temp:	No data available
Partition Coefficient:	No data available	UFL/LFL:	No data available
Vapor Pressure:	Not established		
pH:	No data available		
Evap. Rate:	No data available		
Decomp Temp:	No data available		

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STABILITY AND REACTIVITY

Chemical Stability: This is a stable material under normal conditions.



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Conditions to Avoid:	Avoid high temps, sparks and flames.
Materials to Avoid:	Oxidizing materials, halogens, isocyanates, and acids.
Hazardous Decomposition:	In fire: CO, CO ₂ , oxides of nitrogen, amines, and other aliphatic fragments which have not been determined.
Hazardous Polymerization:	Will not occur

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TOXICOLOGICAL INFORMATION

1-Methyl-2-pyrrolidone (872-50-4)

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - 3,914 mg/kg

LDLO Inhalation - rat - 4 h - > 5100 ppm

LD50 Dermal - rabbit - 8,000 mg/kg

no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: Eyes - rabbit Result: Eye irritation

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Damage to fetus possible

no data available

Specific target organ toxicity - single exposure: Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: UY5790000

prolonged or repeated exposure can cause:, Vomiting, Diarrhoea, Abdominal pain, Rats exposed to 1-methyl-2- pyrrolidinone at a concentration of 1 mg/L as an aerosol for 10 days showed depletion of hematopoietic cells in the bone marrow and atrophy of the lymphoid tissues of the thymus, spleen, and lymph nodes.

Bone marrow - Irregularities - Based on Human Evidence



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12 ECOLOGICAL INFORMATION

1-Methyl-2-pyrrolidone (872-50-4)

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - other fish - 4,000 mg/l - 96 h.

LC50 - Leuciscus idus (Golden orfe) - > 500 mg/l - 96 h

Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - > 1,000 mg/l - 24 h.
other aquatic invertebrates

Toxicity to bacteria LC50 - Bacteria - > 9,000 mg/l:

Persistence and degradability: Biodegradability Result: 90 % - Readily biodegradable.

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: no data available

13 DISPOSAL CONSIDERATIONS

Disposal: Any disposal practice must be in compliance with all federal, state and local laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance are the responsibility solely of the party generating the waste. Do not allow material to enter sewers, a body of water, or contact the ground. Refer to RCRA 40 CFR 261, and/or any other appropriate federal, state or local requirements for proper classification information. If incinerated, toxic and corrosive combustion gases must be properly handled.

14 TRANSPORT INFORMATION

Non DOT/RCRA regulated

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

2-Butenedioic acid (2E)-, diethyl ester (623-91-6) [1-5%] TSCA

1-Methyl-2-pyrrolidone (872-50-4) [0-1%] MASS, NJHS, PA, SARA313, TSCA

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Aspartic ester, trade secret (0) [30-50%] IARC

Oxirane, methyl-, polymer with oxirane, ether with (1,2-ethanediyldinitrilo)tetrakis[propanol] (4:1) (11111-34-5) [1-5%] TSCA

Titanium dioxide (13463-67-7) [25-40%] IARC, MASS, OSHAWAC, PA, TSCA, TXAIR

Aluminum hydroxide (Al(OH)₃) (21645-51-2) [1-5%] TSCA

Silica (7631-86-9) [1-5%] IARC, MASS, NJHS, PA, TSCA

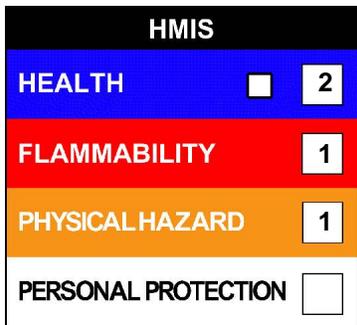
Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites) (1318-02-1) [1-5%] IARC

Regulatory CODE Descriptions

 TSCA = Toxic Substances Control Act
 MASS = MA Massachusetts Hazardous Substances List
 NJHS = NJ Right-to-Know Hazardous Substances
 PA = PA Right-To-Know List of Hazardous Substances
 SARA313 = SARA 313 Title III Toxic Chemicals
 IARC = IARC Carcinogen Risks
 OSHAWAC = OSHA Workplace Air Contaminants
 TXAIR = TX Air Contaminants with Health Effects Screening Level

16	OTHER INFORMATION
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NFPA: Health = 2, Fire = 1, Reactivity = 1, Specific Hazard = n/a
 HMIS III: Health = 2, Fire = 1, Physical Hazard = 1



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