SAFETY DATA SHEET

Print Date: 10/07/2021 Revision Date: 10/07/2021

Product Name	Thermo Strip 2048 Liquid
Product Type	Liquid Stripper
Product #	THERMO-STRIP
Use	Industrial. This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.
Supplier	Columbia Coatings 1173 Industrial Park Rd, Columbia, TN 38401
Contact	Columbia Coatings: (931) 388-7730 Phone (931) 388-5573 Fax EMERGENCY CONTACT: COLUMBIA COATINGS: 931-388-7730

2. HAZARD IDENTIFICATION

1. IDENTIFICATION

*Information pertaining to particular danger for man and environmentHarmful by inhalation and/or if swallowed.

*Classification System

-Classification was made according to the latest editions of international substances lists, and expanded upon from company literature data.

Signalword: Danger

Acute tox, oral (Category 4)

Acute tox, dermal (Category 4)

Skin corrosion/irritation (Category 2)

Serious eye damage/eye irritation (Category 2)

Acute tox, inh. (Category 4)

Specific target organ tox, single exp. (Category 3 [narcotic effects])

Reproductive tox (Category 1)

Hazard Statement:

- Harmful if swallowed
- Harmful in contact with skin
- Causes skin irritation
- Causes serious eye irritation
- May cause respiratory irritation
- May damage fertility or the unborn child

Precautionary Statement:

- Do not handle until all safety precautions have been read and understood
- Wash thoroughly after handling
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- IF ON SKIN: Wash with soap and water
- IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
- 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 advice/attention
- Store locked up
- Dispose of contents/container in accordance with local/regional/national regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous	Case#	TWA-	STEL-	TWA-	STEL-	CONCENTRATE
Components		OSHA	OSHA	ACGIH	ACGIH	%
N-Methyl-2-	872-50-4	n/a	n/a	n/a	n/a	60 - 80
pyrrolidone						
Monoethanol	108-95-2	n/a	n/a	n/a	n/a	20 – 30
Amine						
Proprietary	n/a	n/a	n/a	n/a	n/a	1 - 5

4. FIRST AID MEASURES

*General Advice

-Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

*If Inhaled

-If adverse effects such as dizziness, nausea, or irritation are noted, move person to fresh air. If not breathing, give artificial respiration. Get medical attention!

*In Case Of Skin Contact

-Immediately wash skin with large amounts of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

*In Case Of Eye Contact

-Flush eyes immediately with water for at least 15 minutes. If irritation persists, call a physician.

*If Swallowed

-If swallowed, dilute with water. Never give fluids if the victim is unconscious or having convulsions. Contact a physician immediately!

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indications of any immediate medical attention and special treatment needed No data available

5. FIRE FIGHTING MEASURES

*Extinguishing Media

-Use water, foam, dry chemical, or carbon dioxide.

*Special Hazards

-Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited at locations distant from handling point.

*Advice For Fire-Fighters

-Wear a self-contained breathing apparatus when fighting fire in an enclosed area.

*Further Information

-No data available

6. ACCIDENTAL RELEASE MEASURES

-If material is spilled, eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or other suitable absorbent to spill area; place in closed containers for disposal. Ventilate confined spaces. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Continue to observe precautions for volatile, combustible vapors from absorbed material.

7. HANDLING AND STORAGE

*Information For Safe Handling

-Avoid contact with skin and eyes; wash thoroughly after handling. Avoid breathing vapor; use with adequate ventilation.

*Information For Safe Storage

- Store in a dry location at room temperature. Keep container closed and maintain all original markings and labels. Keep this container and vapors from this container away from heat, sparks, flame, and other ignition sources.

*Specific End Use Considerations

- CAUTION! Do not use cutting or welding torches on containers, even when empty. Containers, even those that have been emptied, will retain product residue and vapors. Do not reuse container without recycling or reconditioning. Handle empty containers as if they were full.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Hazardous	Case#	TWA-	STEL-	TWA-	STEL-	CONCENTRATE
Components		OSHA	OSHA	ACGIH	ACGIH	%
N-Methyl-2-	872-50-4	n/a	n/a	n/a	n/a	60 - 80
pyrrolidone						
Monoethanol	108-95-2	n/a	n/a	n/a	n/a	20 - 30
Amine						
Proprietary	n/a	n/a	n/a	n/a	n/a	1 – 5

*Engineering Control

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

*Eye/Face Protection

-Safety glasses with side shields. Do NOT wear contact lenses. Chemical goggles and/or face shield should be worn where splashing is possible.

*Skin Protection

- Eye wash and safety shower should be readily available. Wear a chemical resistant apron and boots where splashing is possible. For hands, Protective Gloves: Butyl rubber and FEP Teflon provide the best resistance.

*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.

*Respiratory Protection

-Use NIOSH / MSHA approved respirator where high vapor or mist concentrations are present

*Hygiene Measures

-Protective equipment and clothing should be selected, used and maintained according to applicable standards and regulations. For further information, contact the clothing or equipment manufacturer. Do not eat, drink, or smoke while using this product. Wash hands prior to eating, drinking, smoking, or using restrooms. Cleanse skin thoroughly after contact, before breaks and meals, and at the end of the work shift.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical & Chemical Properties	
Appearance:	Amber Color Liquid
Odor:	Light amine odor
Specific Gravity (H20=1)	1.01-1.03
pH:	11
Melting/Freezing Point:	n/a
Initial Boiling Point Range:	n/a
Flash Point:	Above 200 F
% volatile by volume	100%
% solid by weight	None
Upper Explosion Limit:	n/a
Lower Explosion Limit:	n/a
Weight per gallon	8.5-8.6 lb/gallon
Theoretical VOC	8.4-8.6 lbs/gal
Relative Density:	n/a
Water Solubility:	Complete
Partition Coefficient:	n/a
Auto Ignition Temperature:	n/a
Decomposition Temperature:	n/a

10. STABILITY AND REACTIVITY

*Reactivity

-No data available

*Chemical Stability

-Stable under recommended storage conditions.

*Possibility of Hazardous Reactions

-No data available

*Conditions to Avoid

- COMBUSTIBLE! Keep from heat, sparks, or open flame. Product absorbs moisture from the air (hygroscopic).

*Incompatible Materials

- Strong acids, strong oxidizers, and strong reducing agents.

*Hazardous Decomposition Products

- Nitrogen oxides and oxides of carbon

11. TOXICOLOGICAL INFORMATION

N-methyl-2-pyrrolidone [CASRN 000872-50-4]

ACUTE TOXICITY

Oral LD50 (rat) = 4,990 mg/kg (moderately toxic) Eye Irritation (rabbit) - markedly irritating Oral LD50 (mouse) = 5,270 mg/kg (slightly toxic) Skin irritation (rabbit) - markedly irritating Inhalation LC50 (rat) > 5.1 mg/L, 4 hr (moderately toxic) Inhalation safety screen (rat), 8 hr – slightly irritating (No deaths)

Acute Overexposure Effects: Contact with the liquid can result in irritation. Skin contact should be avoided. Prolonged skin contact may result in redness and dermatitis. NMP is moderately toxic by all routes of exposure; however, due to its low vapor pressure, dermal exposure represents the primary hazard in most settings. Contact with the liquid results in moderate eye irritation and may cause temporary corneal clouding. Skin contact results in mild irritation; prolonged skin contact may cause redness and dermatitis. Inhalation of the vapors of NMP may result in respiratory irritation. Accidental ingestion of the liquid causes gastric disturbances and may result in nausea and vomiting.

Reproductive / Development Effects: In animal studies NMP was embryotoxic by the oral, dermal and intraperitoneal routes, but only after repeated high doses that approached the LD50 or were maternally toxic. Embryotoxicity without maternal toxicity was observed at a high concentration in one rat inhalation study, but not in others. Testicular effects in rats were noted after repeated, high dose oral and inhalation exposures. NMP was not carcinogenic in rats receiving lifetime exposures via inhalation (100 ppm) or the diet. NMP was not fetotoxic or teratogenic in rats exposed to NMP vapors up to 0.36 mg/l during gestation (Fund. and Appl. Tox. 9:222-235, 1987). NMP has been reported to cause aneuploidy in saccharomyces, but is not mutagenic in the Ames test

(Env. and Molec. Mut. 11(1) 31-40, 1988). [1-13,12,15-062001], [11,24-13,12,15-110200]

12. ECOLOGICAL INFORMATION

-N-methyl-2-pyrrolidone [CASRN 000872-50-4]

ECOTOXICITY

96 hr LC50 (golden orfe) = 4,000 mg/l, static 24 hr EC/LC50 (daphnia magna) > 1000 mg/l

72 hr EC/LC50 (algal) > 500 mg/l IC50 (bacteria) > 9000 mg/l

Fate: Abiotic Degradability: Photolysis Half-Life 5.2 hrs. Biotic Degradability: BOD 92% (14 day).

Theo. BOD (Modified MITI Test) 73 % (28 day)

Elimination (method not specified) > 90 %, Readily Biodegradable

Chemical Oxygen Demand: 1600 mg/l, Readily Biodegradable

Biological Oxygen Demand, 5 day: 1100 mg/l, Readily Biodegradable

Octanol/Water partition coefficient (log POW): -0.46 [11,24-13,12,15-110200], [1-13,12,15-

062001]

13. DISPOSAL CONSIDERATIONS

*Disposal

-Dispose of contents/container in accordance with local/regional/national/international regulations.

14. TRANSPORTATION INFORMATION

Hazardous Material Description (Proper shipping name, hazard class, hazard ID#, packing group):

Domestic ground non-bulk: UN 3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.,

(MONOTHANOLAMINE), 8, III

Domestic ground bulk: UN 3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.,

(MONOTHANOLAMINE), 8, III

International: UN 3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S., (MONOTHANOLAMINE),

8, III

15. REGULATIONS

TSCA: all raw materials are listed

SARA TITLE III (313): This product contains the following chemical(s) above deminis concentrations and may be subject to reporting under section 313: N-Methyl-2-Pyrrolidone, CAS# 872-50-4, > 95 %

HMIS-Health: 2 HMIS-Fire: 0

HMIS-Reactivity: 0. NFPA-Health: 2

NFPA-Flammability: 0 NFPA-Reactivity: 0

16. OTHER INFORMATION

THIS INFORMATION IS BASED ON OUR PRESENT KNOWLEDGE. HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE FOR ANY SPECIFIC PRODUCT FEATURES AND SHALL NOT ESTABLISH A LEGALLY VALID CONTRACTUAL RELATIONSHIP.

Disclaimer:

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