

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Telephone numbers:	(517) 546-4520
Manufacturer/Supplier:	CHEM-TREND LP P.O. BOX 860 HOWELL, MI 48844-0860
Product Name:	Pura [®] Insulation Remover

2. HAZARDS IDENTIFICATION			
Physical State:	Liquid		
Appearance:	Liquid		
Color:	Clear Colourless to Yellow		
Odor:	Mild Amine		
Principle routes of exposure:	Skin, eyes, respiratory tract, gastrointestinal tract		
	See Toxicological Information (section 11)		

3. COMPOSITION/INFORMATION ON INGREDIENTS			
Ingredient	CAS Registry Number	Weight %	
1-Methyl-2-pyrrolidone	872-50-4	90 - 100%	

4. FIRST AID MEASURES		
Skin contact:	Wash off immediately with soap and plenty of water, removing all contaminated clothes and shoes.	
Eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and contact a physician.	
Inhalation:	Move to fresh air.	
Ingestion:	Drink 2 glasses of water. Contact a physician immediately.	
Aggravated Medical Conditions:	Dermatitis.	
Notes to physician:	No information available.	

5. FIRE-FIGHTING MEASURES

Revision number: 0

Flash point:	199 °F, 93°C (Pensky-Martens, ASTM D 93, ISO 1523, ISO 2719, DIN 51 755, DIN 51758)
Flame extension test, inches (aerosol products only):	Not applicable or no information available.
Suitable extinguishing media:	Carbon dioxide (CO2). Dry chemical. Foam. Do not use a direct stream of water
Unusual hazards:	Combustible material.
Special protective equipment for firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Specific methods:	Standard procedure for chemical fires. Cool containers / tanks with spray water
Explosive properties:	No information available.

6. ACCIDENTAL RELEASE MEASURES				
Method(s) for cleanup:				
Small spills:	Take precautionary measures against static discharges. Soak up with inert absorbent material and dispose of as hazardous waste.			
Large spills:	Dam up. Take precautionary measures against static discharges. Take up mechanically and collect in suitable container for disposal.			

Handling:

Other precautions:	None
Incompatible products:	Strong oxidizing agents.
Technical measures/storage conditions:	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep product and empty container away from open flames, hot surfaces and sources of ignition. Store at temperatures not exceeding 110°F.
Storage:	Normal measures of preventive fire protection. Take precautionary measures against static discharges. Keep product and empty container away from heat, open flames, and other sources of ignition. Bond and ground containers during transfer of material. Do not puncture empty containers. Do not re-use empty containers for other materials.
Safe handling advice:	 Ensure adequate ventilation. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION					
Ingredient	CAS Registry	ACGIH TWA:	OSHA - TWA:	OSHA - Skin	OSHA Z3 Mineral Dusts
	Number			Notations	
1-Methyl-2-pyrrolidone	872-50-4	-	-	-	-
-					

Engineering measures to reduce exposure:	Ensure adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
Personal Protective Equipment	
Respiratory protection:	In case of insufficient ventilation wear suitable respiratory equipment.
Hand protection:	Impervious gloves
Eye protection:	Tightly-fitting safety goggles or safety glasses with side shields.
Skin and body protection:	Lightweight protective clothing. Usual safety precautions while handling the product will provide adequate protection against this potential effect.

Initial boiling point:	~395	~395°F, ~202°C		
Specific gravity:	1.03			
Bulk density (lb/gal):	8.59			
Vapor pressure in mm Hg at 20 °C (68 °		0.29 (n-methylpyrrolidone)		
Vapor density (air = 1):	>1			
Evaporation rate:	<1	n-butyl acetate =	1)	
Volatiles content (%):	Non-	volatile at STP		
Solubility in water:	Insol	Insoluble		
pH of concentrate:		applicable.		
pH of dilution, other:	7.2 (2 10%		
Melting point/range:	No	t applicable		
Flash point:		199 °F,93°C(Pensky-Martens, ASTM D 93, ISO 1523, ISO 2719, DIN 51 755, DIN 51758)		
Flammability limits in a	ir: Perc	ent by volume		
Ingredient	CAS Registry Number	Lower (%):	Upper (%):	
1-Methyl-2-pyrrolidone	872-50-4	1.3	9.5	

10. STABILITY AND REACTIVITY			
Stability:	Stable.		
Conditions to avoid:	Keep away from open flames, hot surfaces and sources of ignition.		
Materials to avoid:	Strong oxidising agents. Strong acids Reducing agents		
Hazardous decomposition products:	Carbon oxides. Nitrogen oxides (NOx).		
Polymerization:	Hazardous polymerisation does not occur.		

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information:

Ingredient	CAS Registry Number	LD50 Oral	LD50 Dermal	LC	C50 Inhalation	
1-Methyl-2-pyrrolidone	872-50-4	3598 mg/kg (Rat)	2000 mg/kg (Rabbit 2500 mg/kg (Rat)	3.1	mg/L(Rat)4 h	
cute effects	Product co	ontains proprietar	y ingredients. H	ealth hazards	are listed below.	
Skin contact:	Causes skin irritation. Repeated or prolonged contact can cause redness, swelling, and cracking					
Eye contact:	Moderately irritating to the eyes.					
Inhalation:	May cause irritation of respiratory tract					
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.					
Sensitization:	No information available.					
Other effects:	In animal studies in rats and mice, N-methylpyrrolidone was embryotoxic by the oral and intraperitoneal routes at very high dose levels which were close to the LD50. In a dermal exposure study with rats, N-methylpyrrolidone was only embryotoxic at high dose levels; this effect was attributed to maternal toxicity. Several inhalation studies in rats did not reveal any indication of maternal toxicity or embryotoxicity.					
nronic effects						
Carcinogenic effects:						
Ingredient	CAS Registry	Number	NTP:	IARC:	OSHA:	
1-Methyl-2-pyrrolidone	872-50		No	No	No	
Mutagenic effects:	No informat	tion available.				
Reproductive toxicity:	No informat	tion available.				
Target organ effects:	No informat	tion available.				

12. ECOLOGICAL INFORMATION				
Ecotoxicity:	No data available.			

13. DISPOSAL CONSIDERATIONS				
Method(s) of disposal:	Dispose of in accordance with local, state, and federal regulations. This product does not fall under current EPA RCRA definitions of hazardous waste.			
US EPA Waste code(s):	None.			

14. TRANSPORTATION INFORMATION

Revision number: 0

IMDG - Marine Pollutants

This product does not contain marine pollutants as classified by the International Maritime Organization.

Emergency Response Guidebook 128 (ERG) No:

Mode of Transportation:	UN/NA ID No:	Proper shipping name:	Technical name:	Hazard Class:	Packing group:	
DOT - Non-Bulk	-	Not regulated	-	-	-	
DOT - Bulk	NA1993	Combustible liquid,	(Contains 1-	-		
		n.o.s.	Methyl-2- pyrrolidone)			
Canadian TDG	-	Not regulated	-	-	-	
ICAO/IATA	-	Not regulated	-	-	-	
IMO/IMDG	-	Not regulated	-	-	-	

15. REGULATORY INFORMATION U.S. Regulations OSHA Hazardous Chemical: Yes Sara Title III CERCLA/SARA (304) Hazardous Substances and RQs CAS Registry Number Ingredient Weight % RQ 1-Methyl-2-pyrrolidone 872-50-4 90 - 100% SARA (302) Extremely Hazardous Substances and RQs Ingredient CAS Registry Number Weight % RQs 872-50-4 1-Methyl-2-pyrrolidone 90 - 100% SARA (311/312) Classification: Acute health hazard: Yes Chronic health hazard: Yes Fire: Yes Sudden release of pressure: No Reactive: No SARA (313) Toxic Chemicals Ingredient CAS Registry Number Weight % SARA (313) List 1-Methyl-2-pyrrolidone 872-50-4 90 - 100% Revision number: 0 Page 6 of 7

15. REGULATORY INFORMATION

International Inventories

Australia:	All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).			
Canada:	This product complies with DSL			
China:	This product complies with CLECS.			
Europe:	This product complies with EINECS			
Japan:	This product complies with ENCS/MITI.			
Korea:	Listed on ECL.			
New Zealand:	This product complies with NEWZ			
Philippines:	This product complies with PICCS.			
United States:	This product complies with TSCA.			

16. OTHER	INFOR	MATION					
Hazardous Mat	terial Inform	mation System (USA):	:				
Health:	2	Flammability:	2	Physical hazard:	0	Personal Protection code:	В
National Fire P	rotection /	Association (USA):					
Health:	2	Flammability:	2	Instability:	0	Special Hazards:	None
All revisions a	re marked	with one or more aste	erisks (*)				
Prepared by:	Karen M	. Kuroda		Revision number: Revision date:		0 08/05/2009	
				Review date:		08/11/2009	
				Print date:		08/11/2009	
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considered to b to be so. Nothin	e dependal ng herein is	ein has been compiled t ble and is accurate and s to be construed as rec	l reliable t commend	o the best of our knowle ing any practice or the i	edge ar use of a	nd belief but is not gua any product in violatior	aranteed n of any

to be so. Nothing herein is to be construed as recommending any practice or the use of any product in violation of any patent or in violation of any law or regulation. It is the users' responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.