

SECTION 1 - IDENTIFICATION

Product Identifier

Product Number(s) *M5776CT*
Product Name *Manhatco All Purpose Lacquer Sizing*

Other Means of Identification *None*

Recommended Use and Restrictions on Use

Recommended Use *Use in millinery industry*
Restrictions on Use *None Identified*

24 hr Emergency
Phone Number

800-255-3924
(Chem-Tel)

MANUFACTURER DETAILS		SUPPLIER DETAILS	
Name	Chem-Pak, Inc.	Name	Manhatco
Address	242 Corning Way Martinsburg WV 25405	Address	124 West 30 th Street #304A New York NY 10018
Phone Number	800-336-9828	Phone Number	212-764-2218
Fax Number	304-262-9643	Fax Number	

SECTION 2 - HAZARD(S) IDENTIFICATION

Hazard Classification

HEALTH HAZARDS				PHYSICAL HAZARDS					
Acute Tox. Oral	4	Mutagenicity	<input type="checkbox"/>	Unstable Explosive	<input type="checkbox"/>	Refrigerated Liq. Gas	<input type="checkbox"/>	Pyrophoric Solid	<input type="checkbox"/>
Acute Tox. Skin	<input type="checkbox"/>	Carcinogenicity	<input type="checkbox"/>	Explosive	<input type="checkbox"/>	Flammable Liquid	<input type="checkbox"/>	Emits Flammable Gas	<input type="checkbox"/>
Acute Tox. Inhalation	<input type="checkbox"/>	Tox. to Reproduction	2	Flammable Gas	<input type="checkbox"/>	Flammable Solid	<input type="checkbox"/>	Oxidizing Liquid	<input type="checkbox"/>
Skin Irritation	2	STOT SE	3	Aerosol	1	Self-Reactive Sub.	<input type="checkbox"/>	Oxidizing Solid	<input type="checkbox"/>
Eye Irritation	<input type="checkbox"/>	STOT RE	2	Oxidizing Gas	<input type="checkbox"/>	Pyrophoric Liquid	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>
Resp. Sensitization	<input type="checkbox"/>	Aspiration Hazard	1	Gas Under Pressure	X	Self-Heating Substance	<input type="checkbox"/>	Corrosive to Metal	<input type="checkbox"/>
Skin Sensitization	<input type="checkbox"/>		<input type="checkbox"/>	ENVIRONMENTAL HAZARDS (GHS Rev 3 Only)					
	<input type="checkbox"/>		<input type="checkbox"/>	Aquatic Acute	<input type="checkbox"/>	Aquatic Chronic	2	Ozone Depleting	<input type="checkbox"/>

Signal Word

Danger

Hazard Pictograms



Hazard Statements

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Precautionary Statements

General

Keep out of reach of children.

Prevention

Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breath spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye protection. Avoid release to the environment.



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Response	Call a doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER. Rinse mouth. Do NOT induce vomiting. If ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice. Take off contaminated clothing and wash before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Collect spillage.
Storage	Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
Disposal	Dispose of contents/container in accordance with local regulations.
Hazards Not Otherwise Classified	None identified.
Unknown Acute Toxicity	12 % by wt

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

ID	INGREDIENT	CAS NUMBER	% WT RANGE*
1	Toluene	0000108-88-3	30 - 60
2	N-Hexane	0000110-54-3	10 - 30
3	Dimethyl Ether	0000115-10-6	10 - 30
4	VM & P Naphtha	0064742-89-8	7 - 13

* Exact percentages of composition withheld as trade secret

SECTION 4 - FIRST AID MEASURES

Description of First-Aid Measures

General	If exposed or concerned seek medical advice/attention.
Eye Contact	Immediately flush with clear water for at least 15 minutes, including under the eyelids. Consult a doctor.
Skin Contact	Remove with soap and water, rinsing and repeating for 15 minutes. Use skin cream to counter any resulting dryness. Consult a physician if irritation continues. If large skin area is affected, remove contaminated clothing.
Ingestion	Do not induce vomiting! Immediately have the victim drink plenty of water. Do not give milk or digestible oils. Keep airways free. Contact a physician. Never give anything by mouth if victim is rapidly losing consciousness, unconscious, or convulsing.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.
First-Aid Responder Protection	Wear adequate personal protective equipment based on the nature and severity of the emergency.

Most Important Symptoms and Effects, Both Acute and Delayed

Eye Contact	Liquid contact may cause pain along with moderate eye irritation.
Skin Contact	Prolonged or repeated exposure may cause skin irritation. Repeated contact may cause drying or flaking of skin. May cause more severe response if confined to skin.
Ingestion	Due to being an aerosol, the product does not lend itself to ingestion. Should ingestion occur, it may cause irritation to membranes of the mouth, throat, and gastrointestinal tract resulting in vomiting and/or cramps. Aspiration of vomit into the lungs may cause inflammation, and possible chemical pneumonitis, bronchopneumonia, or pulmonary edema.
Inhalation	Prolonged or repeated overexposure is anesthetic. May cause irritation of the respiratory tract, or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion or death. Irritation of the mucous membranes, coughing, and dyspnea are also possible.

Indication of Immediate Medical Attention and Special Treatment

Notes to Physician	Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmia (irregular beating) in persons exposed to high concentrations of n-Hexane. If used, monitor heart activity closely.
Specific Treatments/Antidotes	No information available.
Immediate Medical Attention	No information available.

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media	Water, CO2, dry chemical, or universal aqueous film forming foam
Unsuitable Extinguishing Media	Water jet



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Specific Hazards Arising from the Chemical or Mixture

Decomposition Products	Oxides of carbon (CO, CO ₂), smoke, and/or vapors
Hazards from the Product	CONTENTS EXTREMELY FLAMMABLE AND UNDER PRESSURE. In a fire or if heated, a pressure increase will occur which may result in the container bursting. Vapours heavier than air may spread along the ground and travel to an ignition source.

Advice for Firefighters

Protective Actions	Use water spray to cool fire exposed containers as contents may rupture violently from heat developed pressure.
Protective Equipment	As with any fire wear SCBA pressure-demand, MSHA/NIOSH approved, and full protective gear.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel	No action should be taken by non-emergency personnel without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill. Remove ignition sources and provide adequate ventilation only if it is safe to do so.
For Emergency Responders	Use personal protection as recommended in Section 8. Observe precautions provided for non-emergency personnel.

Environmental Precautions

Precautions	Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.
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Methods and Materials for Containment and Cleaning Up

Containment Procedures	Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content may be contained with oil/solvent absorbent pads, socks, and/or absorbents. DO NOT use combustible material such as sawdust.
Cleanup Procedures	Spills from aerosol cans are unlikely and are generally of small volume. Large spills are therefore not normally considered a problem. In case of actual rupture, avoid breathing vapors and ventilate area well. Remove sources of ignition and use non-sparking equipment. Soak up material with inert absorbent and place in safety containers for proper disposal.
Other Information	Aerosol products represent a limited hazard and will not spill or leak unless ruptured. In case of rupture contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned. See Section 13 for disposal.
Prohibited Materials	Combustible absorbent material such as sawdust, use of equipment that may cause sparking.

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling

General Handling Precautions	KEEP OUT OF THE REACH OF CHILDREN. Avoid prolonged or repeated skin contact. Avoid breathing of vapors. Do not incinerate (burn) containers. Always replace overcap when not in use. Avoid use around open flames or other sources of ignition. Exposure to heat or prolonged exposure to sun may cause can to burst. Use only with adequate ventilation, opening doors or windows to achieve cross-ventilation. Wash hands after use.
Hygiene Recommendations	Do not eat, drink or smoke when using this product. Wash hands thoroughly after use. Remove contaminated clothing and protective equipment before entering eating or smoking areas.

Conditions for Safe Storage Including Any Incompatibilities

Storage Requirements	Storage of individual cans should be done in an area below 50 °C (122 °F), and away from heat sources. Ensure can is in a secure place to prevent knocking over and accidental rupture. For storage of pallet quantities, compliance with NFPA 30B (Manufacture and Storage of Aerosol Products) is recommended. This product is classified as a Level 3 Aerosol.
Incompatibilities	Segregate storage away from materials indicated in Section 10

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits

ID	PEL	OSHA		NIOSH			TLV	ACGIH		AIHA
		STEL	CEILING	REL	STEL	CEILING		STEL	CEILING	
1	200 ppm	–	300 ppm	500 ppm	100 ppm	150 ppm	–	50 ppm	150 ppm	–
2	500 ppm	–	–	1100 ppm	50 ppm	–	–	50 ppm	–	–

Biological Exposure Indices

ID	DETERMINANT	SAMPLING TIME	BEI	NOTATION
1	<i>o</i> -Cresol in urine	End of shift	0.5 mg/L	B
2	2,5-Hexanedion in urine	End of shift at end of workweek	0.4 mg/L	–

Other Control Parameters Not Available

Appropriate Engineering Control

Engineering Measures

Use only with adequate ventilation. General ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system may be necessary to control air contamination below that of the lowest OEL from the table above.

Individual Protection Measures

Hygiene Considerations

Avoid breathing vapors and contact with the skin and eyes. Always replace overcap when not in use. Keep out the reach of children. Wash hands after use.

Thermal Protection

This product does not present a thermal hazard.

Respiratory Protection

An approved respirator with organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed occupational exposure limits. If respirators are needed, compliance with OSHA standard 29 CFR 1910.134 is necessary.

Skin Protection

For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing impervious to the ingredients listed in Section 2.

Eye/Face Protection

Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact with this material could occur, chemical splash proof goggles are recommended.

Other Protective Equipment

Safety showers and eye-wash stations should be available in the workplace near where the material will be used.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Properties

Boiling Point	> 68.3 °C (155.0 °F)	Melting / Freezing Point	>-95.0 °C (-139.0 °F)
Flash Point, Liquid	> -21.7 °C (-7.0 °F)	Flash Point, Propellant	-41.1 °C (-42.0 °F)
Explosive Limits	1.10% - 12.60%	Autoignition Temperature, Liquid	225.0 °C (437.0 °F)
Flammability	Extremely Flammable Aerosol	Relative Density (H₂O = 1)	0.784 g/cc
Molecular Weight	Not Available	Weight	6.540 lbs/gal
Vapor Pressure	61.30 psig	pH	Not Available
Vapor Density	3.800 g/cc Maximum	Evaporation Rate	Not Available
Form	Pressurized Product	Partition Coefficient	Not Available
Viscosity	Not Available	Refractive Index	Not Available
Odor Threshold	Not Available	Heat of Combustion (ΔH_c)	Not Available
Odor	Paint-like	Water Solubility	Not Available
Appearance / Color	Clear, colorless	Decomposition Temperature	Not Available

Air Quality Properties

Percent Volatile	88% Wt (91% Vol) Max	VOC Regulatory	5.756 lbs/gal (689.648 g/L)
Percent VOC	88% Wt (91% Vol) Max	VOC Actual	5.756 lbs/gal (689.648 g/L)



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Percent HAP	61% Wt (60% Vol) Max	HAP Content	3.929 lbs/gal (470.759 g/L)
Solids/Non Volatile Content	13% Wt (10% Vol) Max	Maximum Incremental Reactivity	2.16 g O3/g
Global Warming Potential	1.116		

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity is available for this product or its ingredients.
Chemical Stability	This product is stable.
Hazardous Reactions	Under normal conditions of storage and use, hazardous reactions are not expected to occur.
Conditions to Avoid	Keep away from heat, sparks, flame, and red hot metal.
Material Incompatibility	Acids, Alkali Metals, Alkaline Earth Metals, Alkalis, Chlorine, Chlorine Dioxide, Chlorosulfuric Acid, Dinitrogen Tetroxide And Pentoxide, Fluorine, Nitrogen Tetroxide, Potassium Chlorate, Powdered Metal Salts, Silver Perchlorate, Strong Oxidizing Agents, Sulfur Dichloride, Tetranitromethane, Uranium Hexafluoride
Decomposition Productions	Oxides of Carbon may be formed depending on fire conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity Estimates (mixture)

Oral LD₅₀	1036 mg/kg
Dermal LD₅₀	5644 mg/kg
Inhalation LC₅₀	9142 mg/L 4-hour

Acute Toxicity on Ingredients

ID	ORAL LD50		DERMAL LD50		INHALATION LC50		
	VALUE	SPECIES	VALUE	SPECIES	VALUE	TIME	SPECIES
1	636 mg/kg	rat	12124 mg/kg	rabbit	49000 mg/m3	4h	rat
2	32290 mg/kg	rat	3295 mg/kg	rabbit	73680 ppm	4h	rat
3	-	-	-	-	164000 ppm	4h	rat
4	5000 mg/kg	rat	3000 mg/kg	rat	3400 ppm	4h	rat

Health Hazard Classification

Skin Corrosion / Irritation	Category 2
Eye Damage / Irritation	Classification criteria not met
Respiratory Irritation	Classification criteria not met
Respiratory / Skin Sensitization	Classification criteria not met
Germ Cell Mutagenicity	Classification criteria not met
Reproductive Toxicity	Category 2
STOT - Single Exposure	Category 3
STOT - Repeated Exposure	Category 2
Aspiration Hazard	Category 1

ID	Carcinogen Data					
	Calif Prop-65	OSHA	NIOSH	ACGIH	NTP	IARC
	No	No	No	No	No	No

Information on the Likely Routes of Exposure

Routes of Exposure	Skin contact, skin absorption, eye contact, inhalation
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Information on Physical, Chemical and Toxicological Effects

Symptoms of Exposure	Central Nervous System Depression, Chemical Pneumonitis, Dermatitis, Dizziness, Peripheral Neuropathy, Upper Respiratory System Irritation
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Delayed and Immediate Effects and also Chronic Effects from Short and Long-Term Exposure

Delayed Effects	No known delayed effects.
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Immediate Effects

No known immediate effects.

Chronic Effects

Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage (sometimes referred to as "Solvent or Painter's Syndrome"). Intentional misuse by concentrating and inhaling this product may be harmful or fatal. Reports of chronic poisoning from Toluene describe anemia, decreased blood cell count and bone marrow hypoplasia. Liver and kidney damage may occur. Exposure may affect a developing fetus. N-Hexane is toxic to the peripheral nerves, characterized by numbness, tingling, or pain in the extremities, progressively worsening of neuromuscular motor coordination (polyneuritis or polyneuropathy), and even partial paralysis.

Medical Conditions Aggravated

May aggravate personnel with pre-existing disorders associated with any of the Target Organs.

Target Organs

Bladder, Central Nervous System, Eyes, Liver, Peripheral Nervous System, Respiratory System, Skin

SECTION 12 - ECOLOGICAL INFORMATION

Acute Aquatic Toxicity

ID	TYPE	FISH		INVERTEBRATES			AQUATIC PLANTS			MICROORGANISMS		
		VALUE	PERIOD	TYPE	VALUE	PERIOD	TYPE	VALUE	PERIOD	TYPE	VALUE	PERIOD
1	LC50	5.8 mg/L	96h	EC50	6 mg/L	48h	IC50	12 mg/L	72h	EC50	20 mg/L	30m
2	LC50	2.5 mg/L	96h	EC50	2.1 mg/L	48h	EC50	1079 mg/L	96h	-	-	-
3	NOEC	>4000 mg/L	95h	NOEC	>4000 mg/L	48h	-	-	-	EC10	>1600 mg/L	16h

Ecological Data

ID	PERSISTENCE	PERSISTENCE AND DEGRADABILITY			BIOACCUMULATIVE POTENTIAL		MOBILITY
		BOD	COD	ThOD	Pow / Kow	BCF	
1	86% / 20 days	2.15 mg/g	2.52 mg/g	3.13 mg/g	2.65 Pow	1.57 log BCF	2.15 log Koc
2	-	-	-	3530 mg/g	3.9 log Pow	2.73 log BCF	2.17 log Koc
4	95% / 28 days	-	-	-	2.1 log Pow	-	-

Other Adverse Effects

No additional information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal

Characteristics and waste stream classification can change with product use and location. It is the responsibility of the user to determine the proper storage, transportation, treatment, and/or disposal methodologies for spent materials and residues at the time of disposition. All waste must be disposed of in compliance with the respective national, federal, state, and/or local regulations.

Waste Disposal of Packaging

An aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c)(6)), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations.

Landfill Precautions

Not available

Incineration Precautions

** DO NOT INCINERATE ** CONTENTS UNDER PRESSURE **

SECTION 14 - TRANSPORTATION INFORMATION

Transportation Information

UN Number
Proper Shipping Name
Hazard Class(es)
Packaging Group
Marine Pollutant
Hazard Label(s)

Ground Transportation (DOT)

UN1950
 Aerosols, Limited Quantity
 2.1
 —
 No



Air Transportation (IATA)

UN1950
 Aerosols, Flammable, Limited Quantity
 2.1
 —
 No



Ocean Transportation (IMDG)

UN1950
 Aerosols, Limited Quantity
 2.1
 —
 No



SECTION 15 - REGULATORY INFORMATION

Federal Regulations

ID	TSCA LISTED	SARA 302 EHS TPQ	RCRA	CERCLA	SARA 313	FIRE	REACTIVITY	SARA 311/312 ACUTE	CHRONIC	PRESSURE	CLEAN AIR ACT HAP	CLEAN AIR ACT SOCM1	CLEAN WATER ACT
1	Yes	—	U220	1000	14%	Yes	—	Yes	Yes	—	Yes	Yes	1000 (PP)
2	Yes	—	—	5000	19%	Yes	—	Yes	Yes	—	Yes	Yes	—
3	Yes	—	—	—	—	Yes	—	—	—	—	—	—	—
4	Yes	—	—	—	—	—	—	Yes	—	—	—	—	—

State Regulations

ID	CA P-65	DE RQ	MA RTK CODES	ME TYPE	ME RQ	RTK	MN AIR	WATER	NJ RTK	AIR	NY LAND	ACUTE	PA LISTED	WA PEL TWA	WI TABLE	WV TAP
1	D	1000	2,4,5,6 F7 F8 F9	—	2000	ANO	1	1	—	1000	1	—	Yes-E	100 ppm	A	—
2	—	5000	2,4,5,6	—	2000	ANO	1	—	—	1	1	—	Yes	50 ppm	A	—
3	—	1000	5,6	—	—	I	—	—	—	—	—	—	Yes	—	—	—

California Prop 65: Warning! This product contains a chemical (Methyl Isobutyl Ketone Cas# 108-10-1, 0.0285%) known in the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 - OTHER INFORMATION

SDS Revision History

Revision 1, 01/31/2007, Original
 Revision 2, 08/13/2013, Updated to GHS Version 4 Format.
 Revision 3, 12/02/2015, Amended to GHS Version 3 Format.

SDS Compliance

This SDS complies with the below listed regulations only. For SDS that comply with other countries, please contact our Regulatory Department at msds@chem-pak.com
 OSHA Hazard Communication Standard (HCS 2012) 29 CFR 1910.1200
 Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Revision 3

Disclaimer of Liability

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