MATERIAL SAFETY DATA SHEET CHEMSTRIP AEROSOL

DATE OF ISSUE: 09/11/2001 SUPERCEDES: 01/19/1999

SECTION I - GENERAL INFORMATION

Chemical Name & Synonyms:Trade Name & Synonyms:N/ACHEMSTRIP AEROSOL

Chemical Family: Formula Mixture: METHYLENE CHLORIDE/ALCOHOL/SOLVENT SOLUTION X

Manufacturer's Name: CHEMSEARCH DIV. OF NCH CORP.

Address: BOX 152170 IRVING, TX 75015 Prepared By: K Dickinson/Chemist Product Code Number: 5010 Emergency Phone Number: 800-424-9300

SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS:

Chemical Name (Ingredients):ETHYLENE GLYCOL MONOBUTYL ETHERHazard:IRR/COMBTLV:20 PPM 1PEL:25 PPM 2STEL:N/ECAS#:111-76-2

Chemical	Name (Ingredients):	ALIPHATIC PETROLEUM DISTILLATE
Hazard:	IRR/CO	MB
TLV:	100 PPM	f 1
PEL:	500 PPM	[2
STEL:	N/E	
CAS#:	64742-8	38-7

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Chemical Name (Ing	redients): METHANOL		
Hazard: FLAM/TOX			
TI V·	200 PPM 1		
DEI.	200 PPM 2		
TEL.	200 IIW 2 250 DDM 1		
	230 FFW 1 67 56 1		
CAS#.	07-30-1		
Chemical Name (Ing	redients): METHYLENE CHLORIDE		
Hazard:	IRR/CARC		
TLV:	50 PPM 1		
PEL:	25 PPM 2		
STEL:	125 PPM 1		
CAS#:	75-09-2		
Chemical Name (Ing	redients): N-METHYLPYRROLIDONE		
Hazard:	IRR		
TLV:	N/E 1		
PEL:	N/E 2		
STEL:	N/E		
CAS#:	872-50-4		
Chemical Name (Ing	redients): PETROLEUM WAX		
Chemical Name (Ing Hazard:	redients): PETROLEUM WAX IRR		
Chemical Name (Ing Hazard: TLV:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1		
Chemical Name (Ing Hazard: TLV: PEL:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2		
Chemical Name (Ing Hazard: TLV: PEL: STEL:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1 1000 PPM 2		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1 1000 PPM 2 N/E		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: STEL: CAS#:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1 1000 PPM 2 N/E 74-98-6		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1 1000 PPM 2 N/E 74-98-6		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1 1000 PPM 2 N/E 74-98-6 redients): N-BUTANE		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1 1000 PPM 2 N/E 74-98-6 redients): N-BUTANE FLAM/ASPHY 200 DPM 1		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1 1000 PPM 2 N/E 74-98-6 redients): N-BUTANE FLAM/ASPHY 800 PPM 1		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1 1000 PPM 2 N/E 74-98-6 redients): N-BUTANE FLAM/ASPHY 800 PPM 1 N/E 2		
Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#: Chemical Name (Ing Hazard: TLV: PEL: STEL: CAS#:	redients): PETROLEUM WAX IRR 2 MG/M3 \$1 N/E 2 N/E 64742-43-4 redients): PROPANE FLAM/ASPHY 2500 PPM 1 1000 PPM 2 N/E 74-98-6 redients): N-BUTANE FLAM/ASPHY 800 PPM 1 N/E 2 N/E		

Chemical Name (Ingredients): \$ DENOTES EXPOSURE LIMIT FOR FUMES

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Hazard: TLV: PEL: STEL: CAS#:

SECTION IIa - NON-HAZARDOUS INGREDIENTS (NON-HAZARDOUS INGREDIENT NAMES AND CAS NUMBERS ARE PROTECTED UNDER NJ TRADE)

Secret Registry #: 409363-5073P

SECTION III - PHYSICAL DATA

Boiling Point (f):	105
Specific Gravity (H20=1):	1.2
Vapor Pressure (MM HG):	260
Color:	COLORLESS
Vapor Density (Air=1):	2
Odor:	METHYLENE CHLORIDE
PH @ 100%:	N/A
Clarity:	HAZY
Volatile by Volume:	>95
Evaporation Rate (BU A/C	=1): 14
H20 Solubility:	EMULSIFIABLE
Viscosity:	SEMI-VISCOUS

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point: 100 F / SETAFLASH Flammable Limits: AL. PET. DIST./METHANOL LEL: 1% UEL:36%

Extinguishing Media:

Foam: X Alcohol Foam: X CO2: X Dry Chemical: X Water Spray: X Other:

Special Fire Fighting Procedures:

FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. EXTINGUISHING MEDIA SHOULD BE CHOSEN BASED ON THE NATURE OF THE SURROUNDING FIRE. COOL FIRE-EXPOSED CONTAINERS WITH WATER SPRAY TO PREVENT BURSTING. Unusual Fire and Explosion Hazards:

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL TO DISTANT SOURCES OF IGNITION AND FLASHBACK. THERMAL DECOMPOSITION PRODUCES PHOSGENE, HYDROGEN CHLORIDE AND CHLORINE. FLAME EXTENSION IS 30 INCHES, BURNBACK IS 0 INCHES.

Aerosol Level (NFPA 30B): 3 NFPA 704 Hazard Rating: (0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme) Health: 3 Flammability: 4 Instability: 0 Special:

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value:

NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

Effects of Overexposure:

-Acute(Short Term Exposure)

SKIN CONTACT: CAUSES IRRITATION SEEN AS ITCHING, REDNESS, BURNING SENSATION, DEFATTING OF THE SKIN AND MAY CAUSE DERMATITIS. PRODUCT MAY BE ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS WITH EFFECTS SIMILAR TO INGESTION.

EYE CONTACT: CAUSES SEVERE IRRITATION SEEN STINGING, TEARING, REDNESS, SWELLING, EXCESS BLINKING AND TEAR PRODUCTION. PROLONGED CONTACT MAY CAUSE

TRANSIENT CORNEAL INJURY.

INHALATION: CAUSES IRRITATION, HEADACHE, NAUSEA, VOMITING, DROWSINESS, WEAKNESS, APATHY, SLURRED SPEECH, TREMOR, BLURRED VISION, STUTTERING AND STAGGERING GAIT. WITH HIGH EXPOSURE LEVELS, DIZZINESS, LOSS OF CONCENTRATION, CENTRAL NERVOUS SYSTEM DEPRESSION (DRUNKENNESS), UNCONSCIOUSNESS, CARDIAC ARRHYTHMIAS (IRREGULAR HEARTBEATS) AND POSSIBLY

DEATH COULD OCCUR. VAPORS CAN DISPLACE AIR AND CAN CAUSE VOMITING, PULMONARY IRRITATION, DISORIENTATION, EXCITATION, ANESTHESIA AND ASPHYXIATION.

INGESTION: INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE

FATAL. CAUSES HEADACHE, DIZZINESS AND NAUSEA. ALCOHOL MAY EXACERBATE THE

EFFECTS OF OVEREXPOSURE. AVOID ALCOHOL CONSUMPTION. CONTAINS METHANOL

WHICH

MAY CAUSE BLINDNESS IF INGESTED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH WEAKNESS, LEG CRAMPS, BLURRED VISION, PAIN IN ABDOMEN AND LOWER BACK, BLUE COLORING OF SKIN AND NAILS, AND IN EXTREME CASES COMA OR DEATH.

-Chronic (Long Term Exposure)

EXCESSIVE EXPOSURE OF METHYLENE CHLORIDE MAY CAUSE

CARBOXYHEMOGLOBINEMIA,

THEREBY IMPAIRING THE BLOOD'S ABILITY TO TRANSPORT SUFFICIENT OXYGEN. IARC AND NTP HAVE LISTED METHYLENE CHLORIDE AS A POSSIBLE HUMAN CARCINOGEN BECAUSE STUDIES HAVE SHOWN AN INCREASE IN MALIGNANT TUMORS IN MICE AND BENIGN TUMORS IN RATS. OTHER ANIMAL STUDIES AND SEVERAL EPIDEMIOLOGICAL HUMAN STUDIES HAVE FAILED TO SHOW ANY TUMORIGENIC RESPONSES. UPON REPEATED

OR PROLONGED CONTACT OF ETHYLENE GLYCOL MONBUTYL ETHER, THIS PRODUCT MAY

CAUSE SEVERE IRRITATION AND MAY BE ABSORBED IN TOXIC AMOUNTS. EXCESSIVE INHALATION OF VAPORS MAY CAUSE NASAL AND RESPIRATORY IRRITATION AND CENTRAL

NERVOUS SYSTEM EFFECTS AND ALSO THE PRESENCE OF BLOOD IN THE URINE. INGESTION MAY BE HARMFUL WITH SYMPTOMS SIMILAR TO INTOXICATION, THE SEVERITY

OF WHICH DEPENDS ON THE AMOUNT INGESTED. ABSORPTION THROUGH THE SKIN OR LUNGS FROM REPEATED/PROLONGED SKIN CONTACT OR INHALATION MAY CAUSE LIVER

ABNORMALITIES, KIDNEY OR LUNG DAMAGE, SPLEEN DAMAGE, BLOOD ABNORMALITIES,

WEIGHT LOSS, ANOREXIA AND TESTIS DAMAGE MAY OCCUR. METHANOL CAN CAUSE BLINDNESS AS A RESULT OF EXPOSURE THROUGH INGESTION.

TARGET ORGANS: CENTRAL NERVOUS SYSTEM, HEART, LIVER, LUNGS, KIDNEYS, SPLEEN,

BLOOD-FORMING ORGANS, TESTES, EYES, BRAIN AND PANCREAS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND

SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA AND DERMATITIS AND PRE-EXISTING

LIVER, KIDNEY, BLOOD, SPLEEN, TESTES, PANCREAS, EYE, HEART, BRAIN AND CENTRAL NERVOUS SYSTEM DISEASES.

Primary Routes of Entry: Inhalation: X Ingestion: X Absorption: X

Emergency and First Aid Procedures:

-Inhalation: REMOVE FROM THE AREA TO FRESH AIR. IF NOT BREATHING, CLEAR THE AIRWAY AND START MOUTH TO MOUTH ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION.

-Eye Contact:

IMMEDIATELY RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HOLD THE EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYES AND LIDS WITH WATER. GET IMMEDIATE MEDICAL ATTENTION.

-Skin Contact:

WASH AFFECTED AREAS WITH LARGE AMOUNTS OF SOAP AND WATER FOR 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. GET IMMEDIATE MEDICAL ATTENTION. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE.

-Ingestion:

GIVE 3 TO 4 GLASSES OF WATER, BUT DO NOT INDUCE VOMITING. IF VOMITING OCCURS, GIVE FLUIDS AGAIN. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

-Notes to Physician:

INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL. DEPENDING ON THE AMOUNT INGESTED AND RETAINED AS WELL AS THE TOXICITY OF THE PRODUCT, GASTRIC LAVAGE SHOULD BE CONSIDERED. KEEP PATIENT'S HEAD BELOW HIPS TO PREVENT PULMONARY ASPIRATION. IF COMATOSE, A CUFFED ENDOTRACHAEL TUBE WILL PREVENT ASPIRATION. CHLORINATED HYDROCARBONS MAY SENSITIZE THE HEART TO EPINEPHRINE AND OTHER CIRCULATING CATECHOLAMINES SO THAT ARRHYTHMIAS MAY OCCUR. CAREFUL CONSIDERATION OF THIS POTENTIAL ADVERSE EFFECT SHOULD PRECEDE ADMINISTRATION OF EPINEPHRINE OR OTHER CARDIAC STIMULANTS AND THE

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SELECTION OF BRONCHODILATORS. METHANOL IS METABOLIZED TO FORMALDEHYDE AND FORMIC ACID. THIS IN TURN, MAY CAUSE METABOLIC ACIDOSIS, VISUAL DISTURBANCES AND BLINDNESS. BECAUSE METABOLISM MUST OCCUR BEFORE THE TOXIC EFFECTS, TOXIC SYMPTOMS MAY BE DELAYED FROM 6 TO 30 HOURS FOLLOWING INGESTION. ETHANOL COMPETES FOR THE SAME METABOLIC PATHWAY AND HAS BEEN USED AS AN ANTIDOTE. METHANOL IS EFFECTIVELY REMOVED BY HEMODIALYSIS. ORGANIC ABNORMALITIES RESULTING FROM OVEREXPOSURE TO ETHYLENE GLYCOL MONOBUTYL ETHER BY ANY ROUTE LIKELY WOULD BE AN ABNORMAL BLOOD PICTURE CHARACTERIZED BY ERYTHROPENIA, RETICULOCYTOSIS, GRANULOCYTOSIS AND LEUKOCYTOSIS.

SECTION VI - TOXICITY INFORMATION

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

IARC: YesNTP: YesOSHA: NoACGIH: NoOTHER: No

ETHYLENE GLYCOL MONOBUTYL ETHER

ORL-RAT LD50: 470 MG/KG 3.

SKN-RBT LD50: 220 MG/KG 3.

IHL-RAT LC50: 450 PPM/4H 3.

IHL-RAT TCLO: 100 PPM/6H (6-18D PREG): TER 3.

ALTHOUGH THE LISTED EFFECTS WERE OBSERVED IN LABORATORY ANIMALS UPON INHLATION OF THIS MATERIAL, STUDIES HAVE ALSO SUGGESTED THAT THERE IS LITTLE POSSIBILITY OF SIGNIFICANT ADVERSE HEALTH EFFECTS IN HUMANS EXPOSED IN THE WORKPLACE TO LEVELS THAT COMPLY WITH THE OSHA PERMISSIBLE EXPOSURE LIMIT OF 25 PPM. AT 100 PPM SOME SUBJECTIVE COMPLAINTS WERE SEEN IN SENSITIVE INDIVIDUALS, AND EVEN AT 200 PPM THE PRIMARY COMPLAINT WAS IRRITATION. THIS APPEARS TO BE ONE OF THE FEW MATERIALS TO WHICH THE HUMAN IS MORE RESISTANT THAN THE USUAL EXPERIMENTAL ANIMALS. 4. INHALATION EXPOSURE TO 2-BUTOXYETHANOL PRODUCED SOME EVIDENCE OF CANCER

IN MICE IN A LONG-TERM BIOASSAY, NO EVIDENCE OF CANCER IN MALE RATS AND EQUIVOCAL EVIDENCE IN FEMALE RATS. 5.

ALIPHATIC PETROLEUM DISTILLATE (PRODUCT MIXTURE): IHL-RAT LD50: >700 PPM 6. $\begin{array}{ll} SKN\text{-}RBT \ LD50\text{:} >4 \ G/KG & 6. \\ ORL\text{-}RAT \ LD50\text{:} >25 \ GM/KG & 6. \\ \end{array}$

METHYLENE CHLORIDE ORL-HMN LDLO: 357 MG/KG 3. ORL-RAT LD50: 1600 MG/KG 3. SKN-RBT SDT: 100 MG/24H MODERATE 3. EYE-RBT SDT: 162 MG MODERATE 3. IHL-RAT LC50: 52 G/M3 3. IHL-HMN LDLO: 357 MG/KG 3. IHL-HMN TCLO: 500 PPM/8H 3. TUMORIGENIC DATA IHL-RAT TCLO: 3500 PPM/6H/2Y-I 3. METHYLENE CHLORIDE HAS BEEN EVALUATED FOR POSSIBLE CANCER CAUSING **EFFECTS IN** LABORATORY ANIMALS. INHALATION STUDIES AT CONCENTRATIONS OF 2000 AND 4000 PPM INCREASED THE INCIDENCE OF MALIGNANT LIVER AND LUNG TUMORS IN MICE. THREE INHALATION STUDIES OF RATS HAVE SHOWN INCREASED INCIDENCE OF **BENIGN** MAMMARY GLAND TUMORS IN FEMALE RATS AT CONCENTRATIONS OF 500 PPM AND ABOVE AND INCREASES IN BENIGN MAMMARY GLAND TUMORS IN MALES AT CONCENTRATIONS OF 1500 PPM AND ABOVE. RATS EXPOSED TO 50 AND 200 PPM VIA INHALATION SHOWED NO INCREASED INCIDENCE OF TUMORS. MICE AND RATS EXPOSED BY INGESTION AT LEVELS UP TO 250 MG/KG/DAY LIFETIME AND HAMSTERS EXPOSED VIA INHALATION TO CONCENTRATIONS UP TO 3500 PPM LIFETIME DID NOT SHOW AN INCREASED **INCIDENCE** OF TUMORS. 6. EPIDEMIOLOGY STUDIES OF 751 HUMANS CHRONICALLY EXPOSED TO METHYLENE CHLORIDE IN THE WORKPLACE OF WHICH 252 WERE EXPOSED FOR A MINIMUM OF 20 YEARS DID NOT DEMONSTRATE ANY INCREASE IN DEATHS CAUSED BY CANCER OR CARDIAC PROBLEMS. A SECOND STUDY OF 2227 WORKERS CONFIRMED THESE RESULTS. 6. MUTAGENICITY- METHYLENE CHLORIDE HAS BEEN EVALUATED FOR ITS POTENTIAL TO INDUCE GENOTOXIC EFFECTS BOTH IN VIVO AND IN VITRO SYSTEMS. WITH MIXED RESULTS. BASED ON THIS EVIDENCE, METHYLENE CHLORIDE MAY BE CONSIDERED A

WEAK MUTAGEN IN MAMMALIAN SYSTEMS. 6. REPRODUCTIVE TOXICITY- LABORATORY ANIMAL STUDIES ON MICE, RATS AND RABBITS HAVE BEEN CONDUCTED TO EVALUATE THE POTENTIAL REPRODUCTIVE AND DEVELOPMENTAL EFFECTS OF METHYLENE CHLORIDE EXPOSURES. METHLYENE CHLORIDE EXPOSURE HAS NOT BEEN SHOWN TO CAUSE TERATOGENIC EFFECTS (BIRTH DEFECTS) IN **EXPERIMENTAL** ANIMALS. 6. **METHANOL** ORL-RAT-LD50: 5628 MG/KG 3. IHL-RAT-LC50: 64,000 PPM/4H 3. SKN-RBT-LD50: 15,800 MG/KG 3. SKN-RBT: 20MG/24H MOD 3. EYE-RBT: 100 MG/24H MOD 3. OVEREXPOSURE TO THIS MATERIAL (OR TO ITS COMPONENTS) HAS BEEN SUGGESTED AS A CAUSE OF CENTRAL NERVOUS SYSTEM DAMAGE IN LABORATORY ANIMALS AND VISUAL IMPAIRMENT IN HUMANS. 6. METHANOL HAS CAUSED BIRTH DEFECTS IN LABORATORY ANIMALS, BUT ONLY WHEN INHALED AT EXTREMELY HIGH VAPOR CONCENTRATIONS. THE RELEVANCE OF THIS FINDING TO HUMANS IS UNCERTAIN. 6. N-METHLPYRROLIDONE ORL-RAT LD50: 4990 MG/KG 6. IHL-RAT LC50: >5.1 MG/L/4HR 6. SKN-RBT: MARKEDLY IRRITATING 6. EYE-RBT: MARKEDLY IRRITATING 6. IN ANIMAL STUDIES, N-METHYL PYRROLIDONE 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. 6. PETROLEUM WAX ALTHOUGH THIS SPECIFIC PRODUT HAS NOT BEEN TESTED IN LABORATORY ANIMALS, NO ADVERSE HEALTH EFFECTS HAVE BEEN IDENTIFIED IN TOXICOLOGICAL TESTS

USING SIMILAR HIGHLY REFINED PETROLEUM WAXES. 6.

PROPANE NO TOXICITY DATA AVAILABLE.

N-BUTANE IHL-RAT LC50: 658 G/M3/4H 3. IHL-MUS LC50: 680 G/M3/4H 3. HUMAN VOLUNTEERS EXPOSED REPEATEDLY TO GASES OF SIMILAR HYDROCARON MIXTURES RANGING FROM 250 TO 1000 PPM EXHIBITED NO CARDIAC OR PULMONARY FUNCTION ABNORMALITIES. 6.

SECTION VII - REACTIVITY DATA

Stability: Stable: X Unstable:

Conditions to Avoid: AVOID HEAT, HOT SURFACES, SPARKS AND OPEN FLAMES. Incompatibility (Materials to Avoid):

STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH AND CONCENTRATED HYDROGEN PEROXIDE, ACIDS, ALKALIES, AMINES, AND WATER. METALS SUCH AS ALUMINUM, MAGNESIUM, POTASSIUM, LITHIUM AND ZINC AND PLASTICS AND RUBBERS.

Hazardous Decomposition Products:

OXIDES OF CARBON AND NITROGEN AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS. PHOSGENE, HYDROGEN CHLORIDE AND CHLORINE.

Hazardous Polymerization: May Occur: Will Not Occur: X

Conditions to Avoid: N/A.

SECTION VIII - SPILL OR LEAK PROCEDURES

Steps to be Taken if Material is Released or Spilled: DUE TO THE NATURE OF THE AEROSOL PACKAGING, A LARGE SPILL IS UNLIKELY. FOR A SMALL SPILL, VENTILATE THE AREA AND ABSORB WITH AN INERT MATERIAL AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. WEAR

APPROPRIATE PROTECTIVE CLOTHING.

Waste Disposal Method(s): DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. TYPICAL DISPOSAL IS TO WRAP THE EMPTY AEROSOL CONTAINER IN SERVERAL LAYERS OF NEWSPAPER AND DISPOSE OF IN THE TRASH. AEROSOL RECYCLING PROGRAMS ARE AVAILABLE IN MANY AREAS. DO NOT PUNCTURE OR INCINERATE THIS CONTAINER.

Neutralizing Agent: NONE KNOWN.

SECTION IX - SPECIAL PROTECTION INFORMATION

Required Ventilation:

LOCAL VENTILATION IS RECOMMENDED TO CONTROL EXPOSURE FROM OPERATIONS THAT

CAN GENERATE MISTS OR VAPORS.

Respiratory Protection: A NIOSH/MSHA APPROVED RESPIRATOR IN POORLY VENTILATED AREAS AND/OR FOR EXPOSURE ABOVE THE ACGIH TLV OR OSHA PEL OR WHERE MISTING EXISTS.

Glove Protection: NEOPRENE OR NITRILE RUBBER GLOVES SHOULD BE WORN.

Eye Protection: CHEMICAL GOGGLES AND A FACE SHIELD SHOULD BE WORN.

Other Protection: WEAR PROTECTIVE CLOTHING WHEN HANDLING.

SECTION X - STORAGE AND HANDLING INFORMATION

Storage Temperature:Indoors: XOutdoors:Heated:Refrigerated:

Minimum Temperature: 32 F Maximum Temperature: 100 F

Precautions to be taken in Handling and Storing: USE WITH CAUTION AROUND HEAT, SPARKS, PILOT LIGHTS, STATIC ELECTRICITY AND OPEN FLAME. USE WITH CAUTION AROUND HEAT, SPARKS, PILOT LIGHTS, STATIC ELECTRICITY AND OPEN FLAME.

Other Precautions:

KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT.

SECTION XI - REGULATORY INFORMATION

Chemical Name	CAS Number	Upper % Limit	
METHYLENE CHLORID	E	75-09-2	70
METHANOL	67-56-1	5	
GLYCOL ETHERS	N/A	5	
N-METHYLPYRROLIDO	NE	872-50-4	5

Those Ingredients listed above are subject to the reporting requirements of 313 of Title III and of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

SECTION XII - REFERENCES

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND

BIOLOGICAL EXPOSURE INDICES, ACGIH, 2001.

2. OSHA PEL.

3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFODisc, 2001.

4. DISSOLVING THE MYTHS ABOUT EGBE AND HEALTH, CMA, GLYCOL ETHER PANEL, 1989.

5. CHEMICAL MANUFACTURERS ASSOCIATION, NOVEMBER 9, 1998.

6. VENDOR'S MSDS.

ALL COMPONENTS IN THIS PRODUCT CAN BE FOUND IN THE CURRENT TSCA INVENTORY.

IRR:IRRITANT, FLAM/FLAMM:FLAMMABLE, COMB:COMBUSTIBLE, CORR:CORROSIVE CARC:CARCINOGENIC, TOX:TOXIC, N/A:NOT APPLICABLE, N/E:NOT ESTABLISHED, COC:CLEVELAND OPEN CUP, PMCC:PENSKY-MARTIN CLOSED CUP, TCC:TAGLIABUE CLOSED

CUP, LEL:LOWER EXPLOSION LIMIT, UEL:UPPER EXPLOSION LIMIT, NFPA:NATIONAL FIRE PROTECTION ASSOCIATION, IARC:INTERNATIONAL AGENCY FOR THE RESEARCH ON

CANCER, NTP:NATIONAL TOXICOLOGY PROGRAM, OSHA:OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION, ACGIH:AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS, TLV:THRESHOLD LIMIT VALUE, PEL:PERMISSIBLE EXPOSURE LIMIT, STEL:SHORT-TERM EXPOSURE LIMIT, MLD:MILD, MOD:MODERATE, SEV:SEVERE, MUT:MUTAGENIC, ASPHYX:ASPHYXIANT, PNOS: PARTICULATES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT:STANDARD DRAIZE TEST, ORL: ORAL, HMN: HUMAN, IHL:INHALATION THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT OF CURRENT FORMULATION. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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