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DATE OF ISSUE  
9/14/2004SUPERSEDES  
21/01/2000

## SECTION I - GENERAL INFORMATION

Product Name &amp; Synonyms

Trade Name & Synonyms  
NC-123 PLUS AEROSOLChemical Family:  
SOLVENT MIXTURE

Formula Mixture --&gt; X

Manufacturer's Name:  
HEMSEARCH DIV. OF NCH CORP.Address:  
PO BOX 152170  
DALLAS, TX 75015Prepared By:  
J McDowell/ChemistProduct Code Number  
5625Emergency Phone Number  
800-424-9300

## SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)	Hazard	TLV	PEL	STEL	CAS #
ALIPHATIC PETROLEUM DISTILLATES	IRR/COMB	100 PPM \$1	500 PPM \$2	N/E	8012-95-1
MINERAL OIL	IRRITANT	5 MG/M3\$1	5 MG/M3\$2	10MG/M3\$1	61790-48-5
BARIUM SULFONATE	IRRITANT	0.5MG/M3*1	0.5MG/M3*2	N/E	64741-89-5
SOLVENT REFINED LIGHT PARAFFINIC DISTILLATE	IRRITANT	5 MG/M3\$1	5 MG/M3\$2	10MG/M3\$1	64741-97-5
SOLVENT REFINED LIGHT NAPHTHENIC DISTILLATE	IRRITANT	5 MG/M3\$1	5 MG/M3\$2	10MG/M3\$1	64742-55-8
SEVERELY HYDROTREATED LIGHT PARAFFINIC DISTILLATE	IRRITANT	5 MG/M3\$1	5 MG/M3\$2	10MG/M3\$1	64742-53-6
SEVERELY HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	IRRITANT	5 MG/M3\$1	5 MG/M3\$2	10MG/M3\$1	74-98-6
PROPANE	FLAM/ASPHY	1000PPM**1	1000 PPM 1	N/E	106-97-8
1-BUTANE	FLAM/ASPHY	1000PPM**1	N/E 2	N/E	
STODDARD SOLVENT VALUES					
OIL MIST VALUES					
BARIUM VALUES					
ALIPHATIC HYDROCARBON GASES					
64742-47-8, 64742-88-7, 8052-41-3					

## SECTION IIa - NON-HAZARDOUS INGREDIENTS

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

Secret Registry #: 40936-50000

## SECTION III - PHYSICAL DATA

Boiling Point (F):	300°	Specific Gravity (H2O=1):	0.73
Vapor Pressure (MM HG):	2529	Color:	AMBER
Vapor Density (Air=1):	1.7	Odor:	SOLVENT
PH @ 100% :	N/A	Clarity:	TRANSPARENT
% Volatile by Volume:	92	Evaporation Rate (BU A/C=1):	36.7
H2O Solubility:	INSOLUBLE	Viscosity:	NON-VISCOUS

## SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point 106°F / SETAFLASH	Flammable Limits PROPANE/ISOBUTANE	LEL 1.8	UEL 9.5
Extinguishing Media X --Foam	X --Alcohol Foam	X --CO2	X --Dry Chemical
			X --Water Spray
			--Other

Special Fire Fighting Procedures:  
FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. 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 AND/OR LOW-LYING SOURCES OF IGNITION AND FLASHBACK. PRODUCT MAY PRODUCE A FLOATING FIRE HAZARD AS LIQUID FLOATS ON WATER. FLAME EXTENSION IS 24 INCHES, BURNBACK IS 4 INCHES.

Aerosol Level (NFPA 308): 3

NFPA 704 Hazard Rating (0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)  
1 --Health 4 --Flammability 0 --Instability --Special

## SECTION V - HEALTH HAZARD DATA

Threshold Limit Value:  
NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

Effects of Overexposure:

## SECTION V - HEALTH HAZARD DATA (Continued)

## -Acute (Short Term Exposure)

EYE CONTACT: CAUSES IRRITATION SEEN AS STINGING, TEARING, REDNESS, AND A BURNING SENSATION.

SKIN CONTACT: CAUSES IRRITATION SEEN AS ITCHING, REDNESS, AND A BURNING SENSATION. PROLONGED OR REPEATED CONTACT AS FROM CLOTHING WET WITH MATERIAL MAY CAUSE DRYING, DEFATTING, AND CRACKING OF THE SKIN.

INHALATION: MAY CAUSE RESPIRATORY IRRITATION SEEN AS COUGHING, SNEEZING, AND A BURNING SENSATION OF THE NOSE AND THROAT. AT LOW VAPOR CONCENTRATIONS, NO HARMFUL EFFECTS ARE EXPECTED. AT HIGH VAPOR CONCENTRATIONS, INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS HEADACHE, DIZZINESS, DROWSINESS, WEARINESS, UNCONSCIOUSNESS, POSSIBLE ANESTHETIC EFFECTS FROM CENTRAL NERVOUS SYSTEM DEPRESSION, AND MAY BE FATAL.

INGESTION: MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING, AND DIARRHEA. 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.

## -Chronic (Long Term Exposure)

ON RARE OCCASIONS, PROLONGED AND REPEATED EXPOSURE TO HYDROCARBON MIST POSES A RISK OF CHRONIC LUNG INFLAMMATION. THIS CONDITION IS USUALLY ASYMPTOMATIC AS A RESULT OF REPEATED SMALL ASPIRATIONS. SHORTNESS OF BREATH AND COUGHING ARE THE MOST COMMON SYMPTOMS. ASPIRATION MAY LEAD TO PULMONARY EDEMA AND HEMORRHAGE AND MAY BE FATAL. SIGNS OF LUNG INVOLVEMENT INCLUDE INCREASED RESPIRATION AND HEART RATES AS WELL AS A BLuish DISCOLORATION OF THE SKIN. CHRONIC SKIN CONTACT MAY PROMOTE DERMATITIS AND OIL ACNE. IN RARER CASES, AN INCREASED SENSITIVITY TO SUNLIGHT (PHOTOSENSITIVITY) MAY OCCUR. CHRONIC ABUSE OF SIMILAR MATERIALS HAS BEEN ASSOCIATED WITH IRREGULAR HEART RHYTHMS AND CARDIAC ARREST. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS. TARGET ORGANS: HEART, LIVER, AND CENTRAL NERVOUS SYSTEM. THE PRIMARY ROUTES OF EXPOSURE ARE SKIN AND EYE CONTACT.

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

## Emergency and First Aid Procedures:

## -Inhalation:

REMOVE FROM THE AREA TO FRESH AIR. SEEK MEDICAL ATTENTION IF RESPIRATORY IRRITATION DEVELOPS OR IF BREATHING BECOMES DIFFICULT.

## -Eye Contact:

RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING WITH PLENTY OF WATER FOR SEVERAL MINUTES. SEEK MEDICAL ATTENTION IF IRRITATION DEVELOPS.

## -Skin Contact:

WASH AFFECTED AREAS WITH LARGE AMOUNTS OF SOAP AND WATER FOR 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS. 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 ENDOTRACHEAL TUBE WILL PREVENT ASPIRATION.

## SECTION VI - TOXICITY INFORMATION

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

IARC--> No NTP--> No OSHA--> No ACGIH--> No OTHER--> No

VOC CONTENT: 90% BY WEIGHT, 92.1% BY VOLUME, 656.9 G/L

## ALIPHATIC PETROLEUM DISTILLATES

ORL-RAT LD50: >10 G/KG 4.  
IHL-RAT LC50: >290 PPM 4.  
SKN-RBT LD50: >3 G/KG 4.  
SKN SENSITIZER: NO 4.  
SKN IRRITATION: SLIGHT 4.  
EYE IRRITATION: SLIGHT 4.

THIS HYDROCARBON WAS ADMINISTERED ORALLY 5 DAYS/WEEK TO MALE AND FEMALE RATS AT 100, 500, OR 1000 MG/KG FOR 13 WEEKS. AN ADDITIONAL GROUP WAS DOSED WITH 100 MG/KG FOR 13 WEEKS FOLLOWED BY A 4-WEEK RECOVERY PERIOD. NO MORTALITIES OR CLINICAL EFFECTS WERE OBSERVED. LIVER AND KIDNEY WEIGHTS FOR THE 500 AND 1000 MG/KG EXPOSURE GROUPS WERE SIGNIFICANTLY INCREASED. AFTER THE 4-WEEK RECOVERY PERIOD, THERE WERE NO DIFFERENCES IN ORGAN WEIGHTS. 4.

HYDROCARBON MISTS, AND MINERAL OIL MISTS DERIVED FROM HIGHLY REFINED OILS, ARE REPORTED TO HAVE LOW ACUTE AND SUB-ACUTE TOXICITIES IN ANIMALS. EFFECTS FROM SINGLE AND SHORT-TERM REPEATED EXPOSURES TO HIGH CONCENTRATIONS WELL ABOVE APPLICABLE WORKPLACE EXPOSURE LEVELS INCLUDE LUNG INFLAMMATORY REACTION, LIPOID GRANULOMA FORMATION, AND LIPOID PNEUMONIA. IN ACUTE AND SUB-ACUTE STUDIES INVOLVING EXPOSURES TO LOWER CONCENTRATIONS AT OR NEAR CURRENT WORK PLACE EXPOSURE LEVELS PRODUCED NO SIGNIFICANT TOXICOLOGICAL EFFECTS. IN LONG TERM STUDIES (UP TO TWO YEARS) NO CARCINOGENIC EFFECTS HAVE BEEN REPORTED IN ANY ANIMAL SPECIES TESTED. THESE PETROLEUM DISTILLATES ARE SEVERELY HYDROTREATED, SEVERELY SOLVENT EXTRACTED, AND/OR PROCESSED BY MILD HYDROTREATMENT AND EXTRACTION. FOR THIS REASON, THEY ARE NOT CLASSIFIED AS CANCER HAZARDS. 3.

## MINERAL OIL

IHL-RAT LC50: 2062 PPM/4H 4.  
ORL-RAT LD50: 5000 MG/KG 3.  
SKN-RBT SDT: 100 MG/24H MILD 3.  
EYE-RBT SDT: 250 MG/5D MODERATE 3.

## BARIUM SULFONATE

NO TOXICITY DATA AVAILABLE

## SOLVENT REFINED LIGHT PARAFFINIC DISTILLATE

ORL-RAT LD50: >15 G/KG 4.  
SKN-RBT LD50: >5 G/KG 4.

## SOLVENT REFINED LIGHT NAPHTHENIC DISTILLATE

ORL-RAT LD: >5 G/KG 4.  
SKN-RBT LD: >5 G/KG 4.

## SEVERELY HYDROTREATED LIGHT PARAFFINIC DISTILLATE

NO TOXICITY DATA AVAILABLE

## SEVERELY HYDROTREATED LIGHT NAPHTHENIC DISTILLATE

ORL-RAT LD: >5 G/KG 4.  
SKN-RBT LD: >2 G/KG 4.  
SKN-RBT SDT: 500 MG SEVERE 4.

## PROPANE

IHL-LC50 >40% BY VOLUME 3.

## N-BUTANE

IHL-RAT LC50: 658 G/M3/4H 4.

## SECTION VI - TOXICITY INFORMATION (Continued)

HUMAN VOLUNTEERS EXPOSED REPEATEDLY TO GASES OF SIMILAR HYDROCARBON MIXTURES RANGING FROM 250 TO 1000 PPM EXHIBITED NO CARDIAC OR PULMONARY FUNCTION ABNORMALITIES. 3.

## SECTION VII - REACTIVITY DATA

Stability: X --Stable <--Unstable  
Conditions to Avoid:  
VOID HEAT, HOT SURFACES, SPARKS, AND OPEN FLAMES.

Incompatibility (Materials to Avoid):  
STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH AND CONCENTRATED HYDROGEN PEROXIDE; STRONG ACIDS AND BASES.

Hazardous Decomposition Products:  
OXIDES OF CARBON, NITROGEN, SULFUR, CALCIUM, BARIUM; ALDEHYDES AND SMOKE.

Hazardous Polymerization: <--May Occur X <--Will Not Occur  
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, WEAR APPROPRIATE PROTECTIVE CLOTHING, VENTILATE THE AREA, ABSORB WITH AN INERT MATERIAL AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. USE CARE AS SPILLS MAY BE SLIPPERY.

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 SEVERAL 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:  
N/A

## SECTION IX - SPECIAL PROTECTION INFORMATION

Required Ventilation:  
LOCAL VENTILATION IS RECOMMENDED TO CONTROL EXPOSURE FROM OPERATIONS THAT CAN GENERATE EXCESSIVE LEVELS OF VAPORS OR MISTS. LOCAL VENTILATION IS PREFERRED, BECAUSE IT PREVENTS DISPERSION INTO WORK AREAS BY CONTROLLING IT AT ITS SOURCE.

Respiratory Protection:  
RESPIRATORS SHOULD BE SELECTED BY AND USED UNDER THE DIRECTION OF A TRAINED HEALTH AND SAFETY PROFESSIONAL FOLLOWING REQUIREMENTS FOUND IN OSHA'S RESPIRATORY PROTECTION STANDARD (29 CFR 1910.134) AND ANSI'S STANDARD FOR RESPIRATORY PROTECTION (Z88.2-1992). FOR CONCENTRATIONS ABOVE THE TLV AND/OR PEL BUT LESS THAN 10 TIMES THESE LIMITS, A NIOSH APPROVED HALF-FACEDPIRECT RESPIRATOR EQUIPPED WITH APPROPRIATE CHEMICAL CARTRIDGES MAY BE USED. FOR CONCENTRATIONS GREATER THAN 10 TIMES THE TLV AND/OR PEL, CONSULT THE NIOSH RESPIRATOR DECISION LOGIC FOUND IN PUBLICATION NO. 87-116 OR ANSI Z88.2-1992.

Glove Protection:  
NEOPRENE OR NITRILE RUBBER GLOVES IF REPEATED OR PROLONGED SKIN CONTACT IS LIKELY. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR HAND PROTECTION, 29 CFR 1910.138.

Eye Protection:  
SAFETY GLASSES WITH SIDE SHIELDS IF THE METHOD OF APPLICATION PRESENTS THE LIKELIHOOD OF EYE CONTACT. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR EYE AND FACE PROTECTION, 29 CFR 1910.133.

Other Protection:  
WEAR GENERAL-DUTY WORK CLOTHES AND SHOES. REMOVE OIL SOAKED CLOTHING AND SHOES. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE. A SAFETY SHOWER AND AN EYEWASH STATION SHOULD BE AVAILABLE.

## SECTION X - STORAGE AND HANDLING INFORMATION

Storage Temperature: Indoors--> X Outdoors--> Heated--> Refrigerated-->  
Minimum Temperature: 30°F. Maximum Temperature: 120°F.

Precautions to be Taken in Handling and Storing:  
USE WITH CAUTION AROUND HEAT, SPARKS, PILOT LIGHTS, STATIC ELECTRICITY, AND OPEN FLAME. SOME POROUS MATERIALS SUCH AS RAGS, PAPER, ETC. WHEN WETTED WITH THIS PRODUCT MAY UNDERGO SPONTANEOUS COMBUSTION.

Other Precautions:  
KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE LABEL DIRECTIONS.

## SECTION XI - REGULATORY INFORMATION

Chemical Name	CAS Number	Upper & Limit
BARIUM COMPOUNDS	N/A	5

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

Please call 1-800-527-9919 for additional information if you are a California customer.  
This MSDS is not intended for users in the state of California.

## SECTION XII - REFERENCES

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND BIOLOGICAL EXPOSURE INDICES, ACGIH, 2004.
2. OSHA PEL.
3. VENDOR'S MSDS
4. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFOWeb, 2004.

## SECTION XII - REFERENCES (Continued)

ALL THE COMPONENTS OF THIS PRODUCT ARE IN COMPLIANCE WITH THE TOXIC SUBSTANCES CONTROL ACT (TSCA) AND ARE EITHER LISTED ON THE TSCA INVENTORY OR OTHERWISE EXEMPTED FROM LISTING. -----  
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, FMCC: 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: ASPHYXANT, PNOS: PARTICLES (INSOLUBLE) NOT OTHERWISE  
SPECIFIED, SDT: STANDARD DRAIZE TEST, ORL: ORAL, IHL: INHALATION, HMN: HUMAN -----

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