MATERIAL SAFETY DATA SHEET: AEROLEX PLUS AEROSOL

(0 000-000000- -5438)

DATE OF ISSUE 8/04/2005 | SUPERSEDES 4/17/2003

SECTION I - GENERAL INFORMATION

Chemical Name & Synonyms
N/

Trade Name & Synonyms
AEROLEX PLUS AEROSOL

Chemical Family:
ALCOHOL MIXTURE

Formula Mixture --> X

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

Address:
BOX 152170
IRVING, TX 75015

Prepared By:
M McDowell/Chemist

Product Code Number
5438

Emergency 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 #
ISOPROPANOL	FLAM/IRR	200 PPM 1	400 PPM 2	400 PPM 1	67-63-0
MOLYBDENUM DISULFIDE	IRRITANT	10 MG/M3$1	15 MG/M3$2	N/E	1317-33-5
AROMATIC PETROLEUM DISTILLATE	FLAM/IRR	100 PPM$$1	500 PPM$$2	N/E	64742-95-6
PROPANE	FLAM/ASPHY	1000 PPM#1	1000 PPM 2	N/E	74-98-6
ISOBUTANE	FLAM/ASPHY	1000 PPM#1	N/E 2	N/E	75-28-5
ETHYLCELLULOSE	IRRITANT	10 MG/M3*3	15 MG/M3*3	N/E	9004-57-3

$ MOLYBDENUM INSOLUBLE COMPOUNDS
# ALIPHATIC HYDROCARBON GASES
* VENDOR SUGGESTED VALUE
$$ STODDARD SOLVENT VALUES

SECTION III - PHYSICAL DATA

Boiling Point (F):	180°	Specific Gravity (H20=1):	0.817
Vapor Pressure (MM HG):	1323.4	Color:	DARK GRAY
Vapor Density (Air=1):	1.9	Odor:	ALCOHOL
PH @ 100% :	N/A	Clarity:	OPAQUE
% Volatile by Volume:	99	Evaporation Rate (BU A/C=1):	51.5
H2O Solubility:	NEGLIGIBLE	Viscosity:	SLIGHT VISCOUS

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point
47°F / SETAFLASH

Flammable Limits — LEL — UEL
PRODUCT MIXTURE — 1.8 — 12.7

Extinguishing Media
X <--Foam <--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 >36 INCHES, BURNBACK IS 6 INCHES.

Aerosol Level (NFPA 30B): 3

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

SECTION V - HEALTH HAZARD DATA

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

Effects of Overexposure:
-Acute (Short Term Exposure)
EYE CONTACT: CAUSES IRRITATION SEEN AS STINGING, TEARING, BLURRED VISION, SWELLING, A BURNING SENSATION, AND REDNESS. PROLONGED CONTACT MAY CAUSE CORNEAL DAMAGE.
SKIN CONTACT: MAY CAUSE IRRITATION SEEN AS ITCHING AND REDNESS. PROLONGED OR REPEATED CONTACT AS FROM CLOTHING WET WITH MATERIAL MAY CAUSE DRYING, DEFATTING, AND CRACKING OF THE SKIN. PRODUCT MAY BE ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS.
INHALATION: CAUSES RESPIRATORY IRRITATION SEEN AS COUGHING AND SNEEZING. 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, WEAKNESS, UNCONCIOUSNESS, 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 VOMITTING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SIMILAR TO INHALATION.

SECTION V - HEALTH HAZARD DATA (Continued)

-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 SENSTIVITY TO SUNLIGHT (PHOTOSENSITIVITY) MAY OCCUR.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS.
TARGET ORGANS: CENTRAL NERVOUS SYSTEM. THE PRIMARY ROUTES OF EXPOSURE ARE SKIN AND EYE CONTACT.

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

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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 PLENTY OF SOAP AND WATER FOR SEVERAL MINUTES. SEEK MEDICAL ATTENTION IF IRRITATION DEVELOPS.

-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.

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: 95% BY WEIGHT, 98.7% BY VOLUME, 672.4 G/L

ISOPROPANOL
ORL-HMN LDLo: 3570 MG/KG 3.
ORL-RAT LD50: 5045 MG/KG 3.
IHL-RAT LC50: 16000 PPM/8H 3.
SKN-RBT LD50: 12800 MG/KG 3.
SKN-RBT SDT: 500 MG MILD 3.
EYE-RBT SDT: 10 MG MODERATE 3.

MOLYBDENUM DISULFIDE
ORL-RAT LD50: >2 GM/KG 3.
ORL-RAT LDLo: 6 GM/KG 3.
IHL-RAT LC50: >2820 MG/M3/4H 3.
SKN-RAT LD50: >2 GM/KG 3.

AROMATIC PETROLEUM DISTILLATES
ORL-RAT LD50: 8400 MG/KG 3.
IHL-RAT TCLO: 1320 PPM/6H/90D-I 3.
EYE-RBT SDT: 100 UL/24H MILD 3.

HYDROCARBON MISTS DERIVED FROM PETROLEUM DISTILLATES 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. 4.

PROPANE
IHL-LC50 >40% BY VOLUME 4.

ISOBUTANE
IHL-RAT LC50: 658 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. 4.

ETHYLCELLULOSE
ORL-RAT LD50: >5 GM/KG 3.
SKN-RBT LD50: >5 GM/KG 3.
SKN-RBT SDT: 500 MG/24H MILD 3.

SECTION VII - REACTIVITY DATA

Stability: X <--Stable <--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, CAUSTICS, CHLORINATED COMPOUNDS, HALOGENS, AMINES, ALKANOLAMINES AND ALDEHYDES.

Hazardous Decomposition Products:
OXIDES OF CARBON, SULFUR, AND MOLYBDENUM.

Hazardous Polymerization: <--May Occur X <--Will Not Occur
Conditions to Avoid:
N/A

SECTION VII - REACTIVITY DATA (Continued)

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 MISTS AND VAPORS. 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 RESPIRATOR 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-FACEPIECE 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 USE 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. A SAFETY SHOWER AND AN EYEWASH STATION SHOULD BE AVAILABLE. REMOVE SOAKED CLOTHING AND SHOES. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE.

SECTION X - STORAGE AND HANDLING INFORMATION

Storage Temperature: Indoors--> X Outdoors--> Heated--> Refrigerated-->
Minimum Temperature: 0°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.

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
None		

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, 2005.
2. OSHA PEL.
3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFOWeb, 2005.
4. VENDOR'S MSDS.

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, 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:PARTICLES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT:STANDARD DRAIZE TEST, ORL:ORAL, IHL:INHALATION, HMN:HUMAN
