

MATERIAL SAFETY DATA SHEET: GEL GUARD AEROSOL

Section I - General Information

(000000-000000- - 5441)

Date of Issue:
7/21/2005 12:00:00 AM

Supersedes:
3/28/2001 12:00:00 AM

Chemical Name & Synonyms:
N/A

Trade Name & Synonyms:
GEL GUARD AEROSOL

Chemical Family:
HYDROCARBONS

Formula is a mixture: [√]

Manufacturer Name:
MANTEK, DIVISION OF NCH CORP.

Manufacturer Address:
BOX 152170
IRVING, TEXAS 75015

Prepared By:
L Boynton/Chemist

Product Code Number:
5441

Emergency Phone Number:
800-424-9300

Section II - Hazardous Ingredients

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

<u>Chemical Name (Ingredients)</u>	<u>Hazard</u>	<u>TLV</u>	<u>PEL</u>	<u>STEL</u>
N-HEXANE	FLAM/IRR	50 PPM 1	500 PPM 2	N/E
N-HEPTANE	FLAM/IRR	400 PPM 1	500 PPM 2	500 PPM 1
CYCLOHEXANE	IRRITANT	100 PPM 1	300 PPM 2	N/E
PETROLATUM	IRRITANT	5 MG/M3 1	5 MG/M3 2	10 MG/M3 1
PROPANE	FLAM/ASPHY	1000 PPM\$1	1000 PPM 2	N/E
N-BUTANE	FLAM/ASPHY	1000 PPM\$1	N/E 2	N/E
\$ ALIPHATIC HYDROCARBON GASES				

Section III - Physical Data

Boiling Point (°F): 154°	Specific Gravity (H₂O=1): 0.72
Vapor Pressure (mm Hg): 185	Color: OFF-WH
Vapor Density (Air=1): 3.0	Odor: HEXANE
pH @ 100% : N/A	Clarity: CLOUDY
% Volatile by Volume: 80	Evaporation Rate (BuAc=1): 8.0
H₂O Solubility: NEGLIGIBLE	Viscosity: NON-VIS

Section IV - Fire and Explosion Hazard

Flash Point: <73°F
Flammable Limits: PRODUCT MIXTURE
LEL: 1.1%

Method Used: SETAFLASH
UEL: 9.5%
Aerosol Level (NFPA 30B): 3

Extinguishing Media:

[√] Foam [] Alcohol Foam [√] CO₂
[√] Dry Chemical [√] Water Spray [] Other

NFPA 704 Hazard Rating:

Health: 1
Flammability: 4
Instability: 0
4-Extreme
3-High
2-Moderate
1-Slight

0-Insignificant

Special:

Special Fire Fighting Procedures:

FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. C 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. FLASHBACK. PRODUCT MAY PRODUCE A FLOATING FIRE HAZARD AS LIQUID FLOATS ON WATER. FLAME EXT >30 INCHES, BURNBACK IS 4 INCHES.

Section V - Health and Hazard Data

Threshold Limit Value:

NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

Effects of Overexposure:**Acute: (Short Term Exposure)**

EYE CONTACT: MAY CAUSE IRRITATION SEEN AS TEARING, STINGING, REDNESS, A BURNING SENSATION, AND BLURRED VISION. SKIN CONTACT: MAY CAUSE IRRITATION SEEN AS ITCHING, REDNESS, SWELLING, AND A BURNING SENSATION. PROLONGED OR REPEATED CONTACT AS FROM CLOTHING WET WITH MATERIAL MAY CAUSE DEFATTING, AND CRACKING OF THE SKIN. PRODUCT MAY BE ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS. INHALATION: MIST OR VAPOR MAY CAUSE RESPIRATORY IRRITATION SEEN AS COUGHING AND SNEEZING. MAY CAUSE A BURNING SENSATION IN THE NOSE, MOUTH, 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, WEAKNESS, UNCONSCIOUSNESS, POSSIBLE ANESTHESIA EFFECTS FROM CENTRAL NERVOUS SYSTEM DEPRESSION, PULMONARY IRRITATION, AND MAY BE FATAL. IT MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING, AND DIARRHEA. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SIMILAR TO INHALATION. 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)

CHRONIC INHALATION OF SOLVENTS LIKE HEXANE HAVE CAUSED HEARTBEAT IRREGULARITY, HEARTBEAT AND PERMANENT CENTRAL AND PERIPHERAL NERVOUS SYSTEM DAMAGE, RESULTING IN DECREASED LEARNABILITY, LOSS OF MEMORY, PERSONALITY CHANGES, AND DISTURBANCES IN GAIT. A CONDITION KNOWN AS "PAINTER'S SYNDROME" CAN OCCUR CAUSING A LOSS OF SENSATION IN THE ARMS AND HANDS (PERIPHERAL NEUROPATHY). PROLONGED OR REPEATED EXPOSURE MAY CAUSE CARDIAC SENSITIZATION. 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 RESPIRATORY RATES AS WELL AS A BLUISH DISCOLORATION OF THE SKIN. CHRONIC SKIN CONTACT MAY PROMOTE DERMATITIS AND OIL ACNE. IN RARE CASES, AN INCREASED SENSITIVITY TO SUNLIGHT (PHOTOSENSITIVITY) MAY OCCUR. MORE SERIOUS CONDITIONS AGGRAVATED: PRE-EXISTING LIVER DISEASES, PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS, CARDIOVASCULAR, NEUROLOGICAL, AND REPRODUCTIVE SYSTEMS. TARGET ORGANS: MALE REPRODUCTIVE SYSTEM, LIVER, HEART, AND CENTRAL AND PERIPHERAL NERVOUS SYSTEM.

Primary Routes of Entry

Inhalation Ingestion Absorption

Emergency 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:

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 IMMEDIATELY. 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 IN LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL. DEPENDING ON THE AMOUNT INGESTED AND RETENTION AS WELL AS THE TOXICITY OF THE PRODUCT, GASTRIC LAVAGE SHOULD BE CONSIDERED. KEEP PATIENT'S HEAD UP TO PREVENT PULMONARY ASPIRATION. IF COMATOSE, A CUFFED ENDOTRACHEAL TUBE WILL PREVENT ASPIRATION. LIGHT 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 USE OF BRONCHODILATORS. THE NEUROTOXIC PROPERTIES ARE ENHANCED BY EXPOSURE TO KETONES (MEK

Section VI - Toxicity Information

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

IARC NTP OSHA ACGIH Other

VOC CONTENT: 79.4% BY WEIGHT; 84.3% BY VOLUME; 529.7 G/L

N-HEXANE

ORL-RAT LD50: 25 GM/KG 3.
IHL-HMN TCLo: 190 PPM/8W 3.
EYE-RBT-SDT: 10 MG MILD 3.

THIS MATERIAL MAY ADVERSELY AFFECT THE MALE REPRODUCTIVE SYSTEM (DECREASED SPERM COUNTS AND DEGENERATIVE CHANGES IN THE TESTES) BASED ON TESTING IN LABORATORY ANIMALS. 4.

N-HEPTANE

IHL-RAT LC50: 103 G/M3/4H 3.
ORL-RAT TDLo: 60 G/KG/3W-1 3.

CYCLOHEXANE

ORL-RAT LD50: 12705 MG/KG 3.
SKN-RBT LD: >180 GM/KG 3.
SKN-RBT-SDT: 1548 MG/2D (INTERMITTENT) 3.
IHL-RAT TCLo: 300 PPM/6H/2W-I 3.

PETROLATUM

SKN-RBT TDLo: 100 ML/KG/30D-I 3.

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 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.

N-BUTANE

IHL-RAT LC50: 658 G/M3/4H 3.

HUMAN VOLUNTEERS EXPOSED REPEATEDLY TO GASES OF SIMILAR HYDROCARBON MIXTURES RANGING FROM 1000 PPM EXHIBITED NO CARDIAC OR PULMONARY FUNCTION ABNORMALITIES. 4.

Section VII - Reactivity Data

Stability

Stable Unstable

Conditions to Avoid:

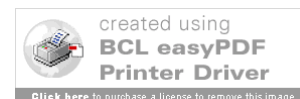
AVOID HEAT, HOT SURFACES, SPARKS, AND OPEN FLAMES.

Hazardous Polymerization

Will not occur May occur

Conditions to Avoid:

N/A

Incompatibility (Materials to Avoid):

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STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH AND CONCENTRATED HYDROGEN PEROXIDE; DIC AND PERMANGANATES.

Hazardous Decomposition Products:

OXIDES OF CARBON; ACRID SMOKE AND VARIOUS HYDROCARBONS.

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, ELIMINATE SOURCES OF IGNITION, WEAR APPROPRIATE PROTECTIVE CLOTHING, VENTILATE THE AREA, ABSORB WITH MATERIAL AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. USE CARE AS SURFACES MAY BE SLIPPERY.

Waste Disposal Method(s):

DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. TYPICAL DISPOSAL IS THE EMPTY AEROSOL CONTAINER IN SEVERAL LAYERS OF NEWSPAPER AND DISPOSE OF IN THE TRASH. AIR 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 OR VAPORS. LOCAL VENTILATION IS PREFERRED, BECAUSE IT PREVENTS DISPERSED CONTAMINANTS 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). STANDARD FOR RESPIRATORY PROTECTION (Z88.2-1992). FOR CONCENTRATIONS ABOVE THE TLV AND/OR 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 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 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 1910.133.

Other Protection:

WEAR PROTECTIVE CLOTHING WHEN HANDLING. 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

Max: 120°F Min: 35°F

Storage Conditions

Indoors Outdoors Heated Refrigerated

Precautions to be Taken in Handling and Storing:

USE WITH CAUTION AROUND HEAT, SPARKS, PILOT LIGHTS, STATIC ELECTRICITY, AND OPEN FLAME.

Other Precautions:

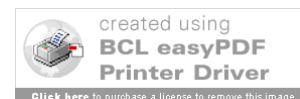
KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE DIRECTIONS.

Section XI - Regulatory Information

Chemical Name
CYCLOHEXANE

CAS Number
110-82-7

Upper % Limit
10



N-HEXANE

110-54-3

40

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 use 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, CCINFODI 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 TSCA. IRR:IRRITANT, FLAM/FLAMM:FLAMMABLE, COMB:COMBUSTIBLE, CORR:CORROSIVE, CARC:CARCINOGENIC, T 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 CONFEDERATION 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:ASPHYXIA, PPOS:PARTICLES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT:STANDARD DRAIZE TEST, ORL:ORAL, IHL:INHALATION, HMN:HUMAN

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