

MATERIAL SAFETY DATA SHEET: DRI-GARD PLUS AEROSOL**Section I - General Information**

(000000-000000- - 5438)

Date of Issue:
8/4/2005 12:00:00 AM**Supersedes:**
4/17/2003 12:00:00 AM**Chemical Name & Synonyms:**
N/A**Trade Name & Synonyms:**
DRI-GARD PLUS AEROSOL**Chemical Family:**
ALCOHOL MIXTURE**Formula is a mixture:** [√]**Manufacturer Name:**
MANTEK, DIVISION OF NCH CORP.**Manufacturer Address:**
BOX 152170
IRVING, TEXAS 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

<u>Chemical Name (Ingredients)</u>	<u>Hazard</u>	<u>TLV</u>	<u>PEL</u>	<u>STEL</u>	<u>CA</u>
ISOPROPANOL	FLAM/IRR	200 PPM 1	400 PPM 2	400 PPM 1	67-
MOLYBDENUM DISULFIDE	IRRITANT	10 MG/M3\$1	15 MG/M3\$2	N/E	13-
AROMATIC PETROLEUM DISTILLATE	FLAM/IRR	100 PPM\$\$1	500 PPM\$\$2	N/E	64-
PROPANE	FLAM/ASPHY	1000 PPM#1	1000 PPM 2	N/E	74-
ISOBUTANE	FLAM/ASPHY	1000 PPM#1	N/E 2	N/E	75-
ETHYLCELLULOSE	IRRITANT	10 MG/M3*3	15 MG/M3*3	N/E	90-
\$ MOLYBDENUM INSOLUBLE COMPOUNDS					
# ALIPHATIC HYDROCARBON GASES					
* VENDOR SUGGESTED VALUE					
\$\$ STODDARD SOLVENT VALUES					

Section III - Physical Data

Boiling Point (°F): 180°	Specific Gravity (H₂O=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 (BuAc=1): 51.5
H₂O Solubility: NEGLIGIBLE	Viscosity: SLIGHT VISCOL

Section IV - Fire and Explosion Hazard**Flash Point:** 47°F
Flammable Limits: PRODUCT MIXTURE**Method Used:** SETAFLASH
UEL: 12.7

LEL: 1.8

Aerosol Level (NFPA 30B): 3

Extinguishing Media:

Foam Alcohol Foam CO2
 Dry Chemical Water Spray Other

NFPA 704 Hazard Rating:

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

Special Fire Fighting Procedures:

FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. COO 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 EXTENS >36 INCHES, BURBACK IS 6 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: 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 V MATERIAL MAY CAUSE DRYING, DEFATTING, AND CRACKING OF THE SKIN. PRODUCT MAY BE ABSORBED THROU 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, DIZZY DROWSINESS, WEAKNESS, UNCONCIOUSNESS, POSSIBLE ANESTHETIC EFFECTS FROM CENTRAL NERVOUS SY DEPRESSION, AND MAY BE FATAL. INGESTION: MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING, AN DIARRHEA. INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRO INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL. MAY CAUSE CENTRAL NERVOUS SYSTEM EF SIMILAR TO INHALATION.

Chronic: (Long Term Exposure)

ON RARE OCCASIONS, PROLONGED AND REPEATED EXPOSURE TO HYDROCARBON MIST POSES A RISK OF CHF LUNG INFLAMMATION. THIS CONDITION IS USUALLY ASYMPTOMATIC AS A RESULT OF REPEATED SMALL ASPIRA 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 INCREAS RESPIRATION AND HEART RATES AS WELL AS A BLUISH DISCOLORATION OF THE SKIN. CHRONIC SKIN CONTACT PROMOTE DERMATITIS AND OIL ACNE. IN RARER CASES, AN INCREASED SENSITIVITY 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: CE NERVOUS SYSTEM. THE PRIMARY ROUTES OF EXPOSURE ARE SKIN AND EYE CONTACT.

Primary Routes of Entry

Inhalation Ingestion Absorption

Emergency First Aid Procedures:**Inhalation:**

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

Eye Contact:

RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING WITH PLENTY OF WA 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 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 AND SHOULDERS 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

NTP

OSHA

ACGIH

Other

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 SUBCHRONIC 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 PRODUCE 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 HYDROCARBON MIXTURES RANGING FROM 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[] Stable [] Unstable**Hazardous Polymerization**[] Will not occur [] May occur**Conditions to Avoid:**

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

Conditions to Avoid:

N/A

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.

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 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 THE EMPTY AEROSOL CONTAINER IN SEVERAL LAYERS OF NEWSPAPER AND DISPOSE OF IN THE TRASH. AERO 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 STANDARD FOR RESPIRATORY PROTECTION (Z88.2-1992). FOR CONCENTRATIONS ABOVE THE TLV AND/OR PEL 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

Max: 120°F Min: 0°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 LABEL DIRECTIONS.

Section XI - Regulatory Information**Chemical Name**

None.

CAS Number**Upper % Limit**

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 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, ; VENDOR'S MSDS. ALL THE COMPONENTS OF THIS PRODUCT ARE IN COMPLIANCE WITH THE TOXIC SUBSTANCE 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 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, PNO:PARTICLES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT:STANDARD DRAIZE TEST, ORL:ORAL, IHL:INHALATION, HMN:HUMAN

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