

(000000-000000- -5441 )

DATE OF ISSUE  
11/06/1998

SUPERSEDES  
N/A

SECTION I - GENERAL INFORMATION

Chemical Name & Synonyms

Trade Name & Synonyms  
GEL GUARD AEROSOL

Chemical Family:  
HYDROCARBONS

Formula Mixture --> X

Manufacturer's Name:  
MANTEK, DIVISION OF NCH CORP.

Address:  
BOX 152170  
IRVING, TEXAS 75015

Prepared By:  
K DICKINSON/CHEMIST

Product Code Number  
5441

Emergency Phone Number  
972-438-1381

SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)	Hazard	TLV	PEL	STEL	CAS #
N-HEXANE	FLAM/IRR	50 PPM 1	50 PPM 2	N/E	110-54-3
CYCLOHEXANE	FLAM/IRR	300 PPM 1	300 PPM 2	N/E	110-82-7
2-METHYL PENTANE	FLAM/IRR	N/E 1	N/E 2	N/E	107-83-5
3-METHYL PENTANE	FLAM/IRR	N/E 1	N/E 2	N/E	96-14-0
ISOPROPYL ALCOHOL	FLAM	400 PPM 1	400 PPM 2	500 PPM	67-63-0
PROPANE	FLAM	1000 PPM 1	1000 PPM 2	N/E	74-98-6
ISOBUTANE	FLAM	N/E 1	N/E 2	N/E	75-28-5

SECTION III - PHYSICAL DATA

Boiling Point (F):	154	Specific Gravity (H2O=1):	0.7
Vapor Pressure (MM HG):	92.8	Color:	TAN
Vapor Density (Air=1):	3.0	Odor:	HEXANE
PH @ 100% :	N/A	Clarity:	OPAQUE
Evaporation Rate by Volume:	79.4	Evaporation Rate (BU A/C=1):	7.7
H2O Solubility:	NEGLIGIBLE	Viscosity:	NON-VISCOUS

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point <73 F / SETA	Flammable Limits HEXANE	LEL 1.0%	UEL 7.0%
Extinguishing Media X <--Foam	<--Alcohol Foam	X <--CO2	X <--Dry Chemical
Special Fire Fighting Procedures: FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR.	<--Water Spray	<--Other	
Unusual Fire and Explosion Hazards: VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL TO DISTANT SOURCES OF IGNITION AND FLASHBACK. PRODUCT MAY PRODUCE A FLOATING FIRE HAZARD AS LIQUID FLOATS ON WATER. FLAME EXTENSION >30 INCHES, BURNBACK 4 INCHES.			
Aerosol Level (NFPA 30B): 3			
NFPA 704 Hazard Rating 1 <--Health	4 <--Flammability	0 <--Reactivity	<--Special
(0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)			

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value: 50 PPM FOR N-HEXANE			
Effects of Overexposure: -Acute (Short Term Exposure) SKIN CONTACT: MAY CAUSE IRRITATION SEEN AS ITCHING AND REDNESS. EYE CONTACT: MAY CAUSE IRRITATION SEEN AS TEARING AND REDNESS. INHALATION: AT LOW LEVELS OF CONCENTRATION, INITIAL SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, LOSS OF CONCENTRATION AND IRRITATION. WITH HIGH EXPOSURE LEVELS, CENTRAL NERVOUS SYSTEM DEPRESSION (INTOXICATION), AND CARDIAC ARRHYTHMIA. 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) TOXIC DATA: PROLONGED AND REPEATED INHALATION OF N-HEXANE MAY PRODUCE PERIPHERAL AND CENTRAL NERVE DAMAGE. PERIPHERAL NERVE DAMAGE MAY BE EVIDENCED BY MUSCULAR WEAKNESS AND LOSS OF SENSATION IN THE ARMS AND LEGS AND DECREASED BODY WEIGHT. MEDICAL CONDITIONS AGGRAVATED: PRE-EXISTING LIVER AND KIDNEY DISEASES AND PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS. TARGET ORGANS: LIVER, LUNGS, SPLEEN, KIDNEY, AND CENTRAL NERVOUS SYSTEM.			
Primary Routes of Entry: X <--Inhalation	<--Ingestion	<--Absorption	
Emergency and First Aid Procedures:			

## SECTION V - HEALTH HAZARD DATA (Continued)

**-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. 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.

## SECTION VI - TOXICITY INFORMATION

## Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

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

## N-HEXANE

EYE-RBT: 10MG MLD 3.

ORL-RAT LD50: 28710MG/KG 3.

IHL-RAT TCLo: 10000 PPM/7H(FEMALE 15D PRE):REP 3.

MIXED ISOMERS OF HEXANE (ISOPARAFFINS) HAS BEEN SHOWN TO CAUSE KIDNEY DAMAGE IN MALE RATS AND CARDIAC SENSITIZATION IN OTHER SPECIES. THE RELEVANCE OF THE KIDNEY EFFECTS TO MAN IS UNKNOWN. THERE IS NO EVIDENCE THAT EXPOSURE TO INDUSTRIALLY ACCEPTABLE LEVELS OF HYDROCARBONS HAVE PRODUCED CARDIAC EFFECTS IN HUMANS. SUCH SENSITIZATION, HOWEVER, MAY CAUSE FATAL CHANGES IN HEART RHYTHM. THIS LATTER EFFECT HAS BEEN SHOWN

## CYCLOHEXANE

SKN-RBT: 1548 MG/25-I 3.

ORL-RAT LD50: 29820 MG/KG 3.

## 2-METHYL PENTANE

ORL-RAT TDLo: 10 GM/KG/4W-I 3.

## 3-METHYL PENTANE

NO TOXICITY DATA AVAILABLE.

## ISOPROPYL ALCOHOL

ORL-RAT LD50: 5045 MG/KG 3.

IHL-RAT LC50: 16000PPM/8H 3.

SKN-RBT LD50: 12800 MG/KG 3.

## PROPANE

NO TOXICITY DATA AVAILABLE.

## ISOBUTANE

IHL-RAT LC50: 57PPH/15M 3.

## SECTION VII - REACTIVITY DATA

Stability:            X <--Stable            <--Unstable

## Conditions to Avoid:

AVOID HEAT, HOT SURFACES, SPARKS AND OPEN FLAMES.

## Incompatibility (Materials to Avoid):

OXIDIZING AGENTS SUCH AS CHLORINE BLEACH, NITRIC AND SULFURIC ACIDS, HALOGENS, AMINES, AMMONIA, AND FINELY DIVIDED ALUMINUM.

## Hazardous Decomposition Products:

OXIDES OF CARBON.

## Hazardous Polymerization:

X <- May Occur            <- Will Not Occur

## Conditions to Avoid:

N/A

## SECTION VIII - SPILL OR LEAK PROCEDURES

## Steps to be Taken if Material is Released or Spilled:

ELIMINATE ALL SOURCES OF IGNITION. DUE TO THE NATURE OF THE PACKAGING, A LARGE SPILL IS UNLIKELY. FOR A SMALL SPILL, ABSORB WITH A DAMP CLOTH AND RINSE AREA INTO A SANITARY SEWER. 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:

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:

NONE REQUIRED UNDER NORMAL CONDITIONS OF USE. A NIOSH/MSHA APPROVED RESPIRATOR IN POORLY VENTILATED AREAS AND/OR FOR EXPOSURE ABOVE THE ACGIH TLV OR OSHA PEL.

## Glove Protection:

NEOPRENE RUBBER OR NITRILE GLOVES IF REPEATED OR PROLONGED SKIN CONTACT IS LIKELY.

## Eye Protection:

SAFETY GLASSES WITH SIDE SHIELDS IF THE METHOD OF USE PRESENTS THE LIKELIHOOD OF EYE CONTACT.

## SECTION IX - SPECIAL PROTECTION INFORMATION (Continued)

## Other Protection:

WEAR PROTECTIVE CLOTHING WHEN HANDLING.

## SECTION X - STORAGE AND HANDLING INFORMATION

Storage Temperature: Indoors--> X                      Outdoors-->                      Heated-->                      Refrigerated-->  
 Minimum Temperature: 35 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

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Upper % Limit</u>
CYCLOHEXANE	110-82-7	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, 1997.
  2. OSHA PEL.
  3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFODisc, 1998.
  4. 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, ACHGIH: 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,  
 P: PERSISTENT, T: TERATOGENIC, ASPHYX: ASPHYXIAN, PNOX: PARTICULATES NOT OTHERWISE CLASSI-

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.

MANTEK, DIVISION OF NCH CORP. assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage, or disposal of the product.