

SECTION I - GENERAL INFORMATION

Chemical Name & Synonyms

N/A

Trade Name & Synonyms

SUPER CHEMSOLV AEROSOL

Chemical Family:

ALKYL BROMIDE

Formula Mixture -->

X

Manufacturer's Name:

CHEMSEARCH DIV. OF NCH CORP.

Address:

BOX 152170
IRVING, TX 75015

Prepared By:

C Williamson/Chemist

Product Code Number:

5088

Emergency Phone Number:

800-424-9300

SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)

N-PROPYL BROMIDE
ISOPROPANOL
CARBON DIOXIDE

Hazard

IRRITANT
IRRITANT
ASPHYX

TLV

100 PPM 3
400 PPM 1
5000 PPM 1

PEL

N/E 2
400 PPM 2
5000 PPM 2

STEL

N/E
500 PPM 1
N/E

CAS #

106-94-5
67-63-0
124-38-9

SECTION III - PHYSICAL DATA

Boiling Point (F):

160*

Specific Gravity (H2O=1):

1.34-1.36

Vapor Pressure (MM HG):

110.8

Color:

COLORLESS

Vapor Density (Air=1):

4.27

Odor:

SWEET

PH @ 100% :

N/A

Clarity:

TRANSPARENT

% Volatile by Volume:

100

Evaporation Rate (BU A/C=1):

10.10

Volatility:

NEGLECTIBLE

Viscosity:

NON-VISCOUS

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point

>200°F / T.C.C.

Flammable Limits

ISOPROPANOL

LEL

2.0%

UEL

12.7%

Extinguishing Media

X <--Foam X <--Alcohol Foam X <--CO2 X <--Dry Chemical <--Water Spray <--Other

Special Fire Fighting Procedures:

FIREFIGHTERS SHOULD WEAR A SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR.

Unusual Fire and Explosion Hazards:

USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS TO PREVENT BURSTING. NEVER USE A WATER JET AS THIS WILL JUST SPREAD THE FIRE. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL TO DISTANT SOURCES OF IGNITION AND FLASHBACK. FLAME EXTENSION IS 0 INCHES, BURNBACK IS 0 INCHES.

Aerosol Level (NFPA 30B):

1

NFPA 704 Hazard Rating

(0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme)

2 <--Health

1 <--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)

INHALATION: MAY CAUSE RESPIRATORY IRRITATION SEEN AS COUGHING AND SNEEZING. EXPOSURE TO HIGH CONCENTRATIONS MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION SEEN AS HEADACHES, DIZZINESS, ATAXIA AND ANESTHESIA.

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.

EYE CONTACT: MAY CAUSE IRRITATION SEEN AS TEARING AND REDNESS.

SKIN CONTACT: MAY CAUSE IRRITATION SEEN AS ITCHING AND REDNESS. PRODUCT MAY BE ABSORBED THROUGH INTACT SKIN WITH EFFECTS SIMILAR TO INHALATION.

-Chronic (Long Term Exposure)

EXPOSURE TO HIGH DOSES MAY CAUSE LIVER, LUNG AND KIDNEY EFFECTS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA AND DERMATITIS.

TARGET ORGANS: CENTRAL AND PERIPHERAL NERVOUS SYSTEMS, HEART, LIVER, LUNGS, KIDNEYS AND TESTES.

Primary Routes of Entry:

X <--Inhalation <--Ingestion X <--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.

SECTION V - HEALTH HAZARD DATA (Continued)

-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 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: 96.7% BY WEIGHT

N-PROPYL BROMIDE

SKN-RAT LD50: >2 G/KG 6.
ORL-RAT LD50: 4260 MG/KG 3.
IHL-RAT LC50: 25300 MG/M3/0.5 HR 3.
IHL-RAT LC50: 35000 MG/M3/4 HR 5.

THE OVERAL CONCLUSION FROM ANIMAL DATA IS THAT THE MOST SENSITIVE ENDPOINT OF TOXICITY IS PERIPHERAL/CENTRAL NEUROTOXICITY FOLLOWED BY REPRODUCTIVE TOXICITY, LIVER TOXICITY, HEMATOPOIETIC TOXICITY AND CNS PATHOLOGY WITH THE POSSIBILITY OF CARDIAC AND KIDNEY EFFECTS AT NEARLY LETHAL DOSES. HUMAN STUDIES SUGGEST INCREASED INCIDENCE OF HEADACHES, HEMATOPOIETIC EFFECTS AS WELL AS REPRODUCTIVE TOXICITY EFFECT AMONG AFFECTED WORKERS. 7.

ISOPROPANOL

ORL-HMN LDLo: 3570 MG/KG 4.
ORL-RAT LD50: 5500 MG/KG 3.
SKN-RBT LD50: 12000 MG/KG 3.
SKN-RBT SDT: 500 MG MILD 4.
EYE-RBT SDT: 10 MG MODERATE 4.
IHL-RAT LC50: 16000 PPM/8H 4.

CARBON DIOXIDE

IHL-RAT TCLo: 10000 PPM/24(S)-30 DAY(S) CONTINUOUS 3.
IHL-HMN LCLo: 9PPM/5M 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; STRONG ACIDS, STRONG BASES, RUBBER, SOME PAINTS AND PLASTICS.

Hazardous Decomposition Products:

OXIDES OF CARBON AND HYDROGEN BROMIDE.

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 PACKAGING, A LARGE SPILL IS UNLIKELY. PICK UP SPILLED MATERIAL WITH A CLOTH OR SUITABLE ABSORBANT AND DISPOSE OF PROPERLY.

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 MISTS OR VAPORS.

Respiratory Protection:

A NIOSH/MSHA APPROVED RESPIRATOR FOR EXPOSURE ABOVE THE ACGIH TLV OR OSHA PEL OR WHERE MISTING EXISTS.

Glove Protection:

NEOPRENE OR NITRILE RUBBER 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.

Other Protection:

WEAR GENERAL DUTY WORK CLOTHING AND SHOES.

SECTION IX - SPECIAL PROTECTION INFORMATION (Continued)

SECTION X - STORAGE AND HANDLING INFORMATION

Storage Temperature: Indoors--> X Outdoors--> X Heated--> Refrigerated-->
Minimum Temperature: 32°F Maximum Temperature: 120°F

Precautions to be Taken in Handling and Storing:
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>
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, 2001.
 2. OSHA PEL.
 3. VENDOR'S MSDS.
 4. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFODisc, 2001.
 5. INSTITUT NATIONAL DE L'ENVIRONNEMENT INDUSTRIAL ET DES RESQUES, FINAL REPORT (INERISL.E.T.E. STUDY NUMBER 95 122) (1997).
 6. CENTRE INTERNATIONAL DE TOXICOLOGIE, ACUTE DERMAL TOXICITY IN RATS (LABORATORY STUDY NUMBER 13113 TAR) (1995).
 7. DERIVATION OF AN OCCUPATIONAL EXPOSURE LIMIT FOR N-PROPYL BROMIDE, JOHN DOULL, PH.D., M.D. & KARL K. ROZMAN, PH.D., D.A.B.T., 2001.
- 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, CUC: CLEVELAND OPEN CUP, PMCC: PENSKEY-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, PNO: PARTICULATES (INSOLUBLE) NOT OTHERWISE SPECIFIED, SDT: STANDARD DRAIZE TEST,
ORL: ORAL, IHL: INHALATION, HMN: HUMAN

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