

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: DM SUPER SILVER 732
PRODUCT CODE: L-10543

HMIS CODES: H F R P
2 4 0

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: HYDROSOL INC.
ADDRESS: 455 FRONTAGE ROAD, BURR RIDGE, IL 60521
EMERGENCY PHONE: 312-598-5448 INFORMATION PHONE: 312-598-5448
DATE PREPARED : 08-20-87 NAME OF PREPARER : ESP
REASON REVISED : UPDATE

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

| HAZARDOUS COMPONENTS | CAS NUMBER | OCCUPATIONAL EXPOSURE LIMITS | | VAPOR PRESSURE mm Hg @ TEMP | WEIGHT PERCENT |
|---------------------------------------|------------|------------------------------|-----------|--------------------------------|-------------------|
| | | OSHA PEL | ACGIH TLV | | |
| PETROLEUM DISTILLATE, MINERAL SPIRITS | 64742-88-7 | 500 | NOT ESTAB | 2.4 | 68F < 5.0% |
| TOLUENE | 108-88-3 | 100 | 100 | 26.0 | 77F < 5.0% |
| 2-BUTANONE, METHYL ETHYL KETONE | 78-93-3 | 200 | 200 | 70.0 | 68F 5 |
| METHYLENE CHLORIDE, DICHLOROMETHANE | 75-09-2 | 500 | 100 | 420.0 | 77F 5 |
| CYCLOHEXANE | 110-82-7 | 300 | 300 | 78.0 | 68F 40 |
| BUTANE | 106-97-8 | 1000 | NE | 1640.0 | 66F 10 |
| PROPANE | 74-98-6 | 1000 | ASPHYXIAN | 6350.0 | 68F 20 |

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: NOT APPLICABLE SPECIFIC GRAVITY (H2O=1): 0.7
VAPOR DENSITY: N/A EVAPORATION RATE: N/A
V.O.C.: N/A
SOLUBILITY IN WATER: SLIGHT
APPEARANCE AND ODOR: AEROSOL PRODUCT

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A METHOD USED: N/A
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 0.9% UPPER: 19.0%
EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES

WATER SPRAY MAY BE INEFFECTIVE. WATER MAY BE USED TO COOL CONTAINERS TO PREVENT PRESSURE BUILD-UP AND EXPLOSION WHEN EXPOSED TO EXTREME HEAT. IF WATER IS USED, FOG NOZZLES PREFERRED. WEAR GOGGLES AND SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS

CLOSED CONTAINERS MAY EXPLODE FROM INTERNAL PRESSURE BUILD-UP WHEN EXPOSED TO EXTREME HEAT AND DISCHARGE CONTENTS. VAPOR ACCUMULATION CAN FLASH OR EXPLODE IF IGNITED. OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE READILY APPARENT. OBTAIN MEDICAL ATTENTION.

===== SECTION V - REACTIVITY DATA =====

STABILITY: STABLE**CONDITIONS TO AVOID**

APPLICATION TO HOT SURFACES. STORAGE ABOVE 120 DEG F. EXPOSURE TO OPEN FLAME.

INCOMPATIBILITY (MATERIALS TO AVOID)

STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

MAY PRODUCE FUMES WHEN HEATED TO DECOMPOSITION. FUMES MAY CONTAIN CARBON MONOXIDE, CHLORINE, AND HYDROGEN CHLORIDE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

RESPIRATORY IRRITATION, HEADACHE, NAUSEA, FATIGUE, DROWSINESS, IMPAIRED CO-ORDINATION.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

SKIN: CONTACT MAY DRY THE SKIN; PROLONGED CONTACT MAY CAUSE IRRITATION. EYES: LIQUID OR VAPOR CAN IRRITATE; PROLONGED CONTACT MAY LEAD TO CORNEAL DAMAGE.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

NOT EASILY ABSORBED. SOLVENT ACTION CAN DRY AND DEFAT THE SKIN CAUSING THE SKIN TO CRACK, LEADING TO DERMATITIS.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

NOT A LIKELY ACUTE OF EXPOSURE. IF SWALLOWED, DO NOT INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ADVICE AND/OR ATTENTION.

HEALTH HAZARDS (ACUTE AND CHRONIC)

ACUTE: EYE IRRITANT. SKIN IRRITANT. NARCOTIC IN HIGH CONCENTRATIONS.

CHRONIC: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL EXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM AND OTHER INTERNAL ORGAN DAMAGE.

PREGNANT WOMEN SHOULD AVOID EXPOSURE TO SOLVENTS.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

METHYLENE CHLORIDE IS A SUSPECTED ANIMAL CARCINOGEN; STUDIES OF WORKERS IN THE WORKPLACE HAVE NOT CONFIRMED THESE RESULTS. NOT ON OSHA LIST.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

ACUTE AND CHRONIC LIVER AND KIDNEY DISEASE, ANEMIA, CORONARY DISEASE OR RHYTHM DISORDERS OF THE HEART.

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: REMOVE TO FRESH AIR. ADMINISTER OXYGEN IF NEEDED. APPLY ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. GET MEDICAL ATTENTION.

SKIN: WIPE OFF WITH TOWEL. WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

EYES: WASH IMMEDIATELY WITH LARGE VOLUMES OF FRESH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

AVOID BREATHING VAPORS. VENTILATE AREA. REMOVE ALL SOURCES OF IGNITION. CLEAN UP AREA WITH ABSORBENT MATERIAL AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL.

WASTE DISPOSAL METHOD

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. BEFORE ATTEMPTING CLEAN UP, REFER TO OTHER SECTIONS OF THIS MSDS FOR HAZARD CAUTION INFORMATION.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

STORE AND USE IN COOL, DRY, WELL-VENTILATED AREAS. DO NOT STORE ABOVE 120 DEG F. DO NOT PUNCTURE OR INCINERATE (BURN) CANS. DO NOT STICK PIN, NAIL OR ANY OTHER SHARP OBJECT INTO OPENING ON TOP OF CAN. DO NOT SPRAY IN EYES. DO NOT TAKE INTERNALLY. SEE PRODUCT LABEL FOR ADDITIONAL INFORMATION.

OTHER PRECAUTIONS

SMALL PRESSURIZED CONTAINERS OF FLAMMABLE PRODUCTS MAY BE STORED IN AREAS SUITABLE FOR ORDINARY COMBUSTIBLES WITH RESPECT TO CONSTRUCTION, DRAINAGE, CONTROL OF IGNITION SOURCES, AND VENTILATION EXCEPT THAT THEY SHOULD NOT BE STORED IN BASEMENTS.

===== SECTION VIII - CONTROL MEASURES =====

RESPIRATORY PROTECTION

NONE UNDER NORMAL USE. AVOID BREATHING VAPORS. IN RESTRICTED AREAS, USE APPROVED CHEMICAL/MECHANICAL FILTERS DESIGNED TO REMOVE A COMBINATION OF PARTICLES AND VAPOR. IN CONFINED AREAS, USE APPROVED AIR LINE TYPE RESPIRATOR OR HOOD. SELF-CONTAINED BREATHING APPARATUS IS REQUIRED FOR VAPOR CONCENTRATIONS ABOVE PEL/TLV LIMITS.

VENTILATION

SUFFICIENT TO PREVENT INHALATION OF SOLVENT VAPORS. GENERAL DILUTION AND/OR LOCAL EXHAUST VENTILATION IN VOLUME OR PATTERN TO KEEP PEL/TLV OF MOST HAZARDOUS INGREDIENT BELOW ACCEPTABLE LIMIT AND LEL BELOW STATED LIMIT.

PROTECTIVE GLOVES

NONE UNDER NORMAL USE. SOLVENT RESISTANT REQUIRED FOR PROLONGED OR REPEATED CONTACT.

EYE PROTECTION

NONE UNDER NORMAL USE; HOWEVER, USE OF SAFETY GLASSES WITH SPLASH GUARDS OR FULL FACE SHIELD IS RECOMMENDED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

NONE UNDER NORMAL USE; HOWEVER, USE OF SOLVENT RESISTANT APRONS OR OTHER CLOTHING IS RECOMMENDED.

WORK/HYGIENIC PRACTICES

EYE WASHES AND SAFETY SHOWERS IN THE WORKPLACE ARE RECOMMENDED.

===== SECTION IX - DISCLAIMER =====

DISCLAIMER

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