

MILLER-STEPHENSON CHEMICAL CO INC -- MS-222 AERODUSTER -- 6850-01-346-9144

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Product Identification  
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Product ID:MS-222 AERODUSTER

MSDS Date:09/01/1989

FSC:6850

NIIN:01-346-9144

MSDS Number: BMZPH

=== Responsible Party ===

Company Name:MILLER-STEPHENSON CHEMICAL CO INC

Address:GEORGE WASHINGTON HIGHWAY

Box:950

City:DANBURY

State:CT

ZIP:06810

Country:US

Info Phone Num:203-743-4447

Emergenc

y Phone Num:203-743-4447;800-424-9300(CHEMTREC)

Preparer's Name:SOHEILA BURKE

CAGE:18598

=== Contractor Identification ===

Company Name:MILLER-STEPHENSON CHEMICAL CO INC

Address:55 BACKUS AVE/GEORGE WASHINGTON HWY

Box:950

City:DANBURY

State:CT

ZIP:06810

Country:US

Phone:203-743-4447

CAGE:18598

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Composition/Information on Ingredients  
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Ingred Name:METHANE, CHLORODIFLUORO-; (CHLORODIFLUOROMETHANE)

CAS:75-45-6

RTECS #:PA6390000

= Wt:100.

OSHA PEL:1000 PPM

ACGIH TLV:1000

PPM  
Ozone Depleting Chemical:2

===== Hazards Identification =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:HUMAN HEALTH EFFECTS OF OVEREXPOSURE TO VAPORS BY INHALATION MAY INCLUDE TEMPORARY NERVOUS SYSTEM DEPRESSION WITH ANAESTHETIC EFFECTS SUCH AS DIZZINESS, HEADACHE, CONFUSION, INCOORDINATION, AND LOSS O F CONSCIOUSNESS. HIGH EXPOSURE TO VAPORS MAY CAUSE TEMPORARY ALTERATION OF HEART'S ELECTRIC ACTIVITY WITH IRREGULAR PULSE, PALPITATIONS, OR INADEQUATE CIRCULATION OR FATALITY FROM GROSS OVEREXPOSURE. SKIN CONTACT WITH LIQUID MAY CAUSE FROSTBITE. TOXIC EFFECTS DESCRIBED IN ANIMALS EXPOSED BY INHALATION TO CONCENTRATIONS RANGING FROM 5% TO 70% INCLUDE EFFECTS ON CENTRAL NERVOUS SYSTEM, LIVER, LUNGS, KIDNEYS, (EFFECTS OF OVEREXPOSURE)

Explanation of Carcinogeni  
city:NOT RELEVANT.

Effects of Overexposure:HEALTH HAZARDS ACUTE AND CHRONIC (CONT): SPLEEN; CARDIAC SENSITIVITY; DECREASED BODY WEIGHT GAIN; AND PARTIAL ANAESTHESIA. IN CHRONIC INHALATION STUDIES MS-222 PRODUCED SMALL, BUT STATISTICALLY SIGNIF ICANT, INCREASE IN TUMORS IN MALE RATS,BUT NOT IN FEMALE RATS OR MALE OR FEMALE MICE, AT A CONCENTRATION OF 50,000 PPM (V/V). IN SAME STUDIES, NO CARCINOGENIC EFFECTS WERE SEEN IN EITHER SPECIES AT A CONCENTRATION OF 10,000 OR 1,000 PPM (V/V), MS-222 WAS MUTAGENIC IN BACTERIAL CELL CULTURES BUT NOT IN MAMMALIAN CELL CULTURES, AND WAS NOT MUTAGENIC IN WHOLE ANIMAL ASSAYS. A SLIGHT, BUT SIGNIFICANT, INCREASE IN (TOXICOLOGICAL INFO)

Medical Cond Aggravated by Exposure:INDIVIDUALS WITH PREEXISTING DISEASES OF CENTRAL NERVOUS OR CARDIOVASCULAR SYSTEM MAY HAVE INCREASED SUSCEPTIBILITY TO TOXICITY OF EXCESSIVE EXPOSURES.

===== First Aid Measures =====

First Aid:INH

ALATION: IMMEDIATELY REMOVE TO FRESH AIR. KEEP PERSON CALM. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. EYE CONTACT: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN. SKIN CONTACT: FLUSH WITH WATER. TREAT FOR FROSTBITE IF NECESSARY. INGESTION: CALL A PHYSICIAN IMMEDIATELY . NOTE TO PHYSICIAN: BECAUSE OF POSSIBLE DISTURBANCES OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, SHOULD BE USED WITH SPECIAL CAUTION ONLY IN SITUATIONS OF EMERGENCY LIFE SUPPORT.

===== Fire Fighting Measures =====

Flash Point Method:TOC  
Flash Point:NONE  
Extinguishing Media:AS APPROPRIATE FOR COMBUSTIBLES IN AREA.  
Fire Fighting Procedures:WEAR NIOSH APPROVED PRESSURE DEMAND SCBA AND FULL PROTECTIVE EQUIPMENT .  
Unusual Fire/Explosion Hazard:OTHER BURNING MATERIAL MAY CAUSE MS-222 TO BURN WEAKLY. EXTINGUISHERS FOR OTHER BURNING MATERIAL IN AREA IS SUFFICIENT TO STOP BURNING. USE WATER SPRAY OR FOG TO COOL CONTAINERS. THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE FLUORIDES, CHLORIDES AND PHOSGENE .

===== Accidental Release Measures =====

Spill Release Procedures:VENTILATE AREA-ESPECIALLY LOW PLACES WHERE HEAVY VAPORS MIGHT COLLECT. REMOVE OPEN FLAMES. USE NIOSH APPROVED SCBA FOR LARGE SPILLS OR RELEASES.  
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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==== Handling and Storage =====

Handling and Storage Precautions:STORE IN CLEAN, DRY AREA. DO NOT HEAT ABOVE 125F. AVOID BREATHING VAPORS AND LIQUID CONTACT WITH SKIN OR EYES. USE WITH SUFFICIENT VENTILATION TO KEEP EMPLOYEE EXPOSURES BELOW RECOMMENDED LIMITS.  
Other Precautions:VAPOR REDUCES OXYGEN AVAILABLE FOR BREATHING AND IS HEAVIER THAN AIR. INTENTIONAL MISUSE CAN BE FATAL. NO SMOKING IN AREA OF USE. DO NOT USE IN THE GENERAL VICINITY OF ARC WELDING,

OPEN FLAMES OR HOT SURFACES. HEAT AND/OR UV RADIATION MAY CAUSE THE FORMATION OF HCL AND/OR PHOSGENE .

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:WEAR NIOSH APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN .

Ventilation:NORMAL VENT FOR STD PROCEDURES IS GENERALLY ADEQUATE. LOCAL EXHAUST SHOULD BE USED WHEN LARGE AMOUNTS RELEASED. MECHANICAL VENT SHOULD BE USED IN LOW PLACES.

Protective Gloves:IMPERVIOUS GLOVES .

Eye Prot

ection:ANSI APPROVED CHEMICAL WORKERS GOGGLES .

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

HAZ DECOMP PRODS: HYDROFLUORIC ACIDS, & POSS CARBONYL HALIDES. CHLORIDES, FLUORIDES & PHOSGENE .

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===== Physical/Chemical Properties =====

Boiling Pt:B.P. Text:-41F,-41C

Vapor Pres:151 PSIA @ 77F

Vapor Density:3.03 @ 77F

Spec Gravity:1.194 G/CC @ 77F

pH:NEUT

Evaporation Ra

te & Reference:>1 (CARBON TETRACHL = 1)

Solubility in Water:0.30% (WT) @ 77F

Appearance and Odor:CLEAR, COLORLESS, LIQUIFIED GAS, SLIGHT ETHEREAL ODOR.

Percent Volatiles by Volume:100

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===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

ALKALI OR ALKALINE EARTH METALS, POWDERED AL, BE, ZN, ETC.

Stability Condition to Avoid:OPEN FLAMES AND HIGH TEMPERATURES.

Hazardous Decomposition Products:MS-222 AERODUSTER CAN BE DECOMPOSED BY HIGH TEMPS (OPEN FLAMES, GLOWING METAL SURFACES, ETC.) FORMING HYDROCHLORIC & HYDROFLUORIC ACIDS & POSSIBLY CARBONYL HALIDES. CHLORIDES, FLUORIDES & PHOSGENE.

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===== Toxicological Information =====

Toxicological Information:N/P. SIGNS AND SYMPTOMS OF OVEREXPOSURE

(CONT): DEVELOPMENTAL TOXICITY (EYE MALFORMATIONS, DECREASED FETAL WEIGHTS) HAS BEEN OBSERVED IN OFFSPRING OF RATS EXPOSED TO HIGH CONCENTRATIONS (50,000 PPM) OF MS-222, A CONCENTR

ATION WHICH WAS

ALSO MATERNALLY TOXIC; NO EFFECT ON FETUS OR MATERNAL RATS WAS SEEN AT 10,000 OR 1,000 PPM. CHLOROFLUOROCARBON (CFC) MATERIALS HAVE PRODUCED SENSITIZATION OF THE MYOCARDIUM TO EPINEPHRINE IN LAB ANIMALS AND COULD HAVE A SIMILAR EFFECT IN HUMANS. ADRENOMIMETICS (E.G. EPINEPHRINE) MAY BE CONTRAINDICATED EXCEPT FOR LIFE-SUSTAINING USES IN HUMANS ACUTELY EXPOSED TO CHLOROCARBONS OR CFC'S .

===== Disposal Considerations =====

Waste Disposal Methods:COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

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