

MA T E R I A L S S A F E T Y D A T A S H E E T P A G E 1
DOW CHEMICAL U.S.A. MIDLAND MICHIGAN 48640 EMERGENCY PHONE: 517-636-4400

EFFECTIVE DATE: 27 JUN 80

PRODUCT CODE: 91575

PRODUCT NAME: VINYL CHLORIDE MONOMER

MSD: 664

INGREDIENTS (TYPICAL VALUES-NOT SPECIFICATIONS)

VINYL CHLORIDE

: 100 %
: 99.9 %
: 100 %

SECTION 1

PHYSICAL DATA

BOILING POINT: -13.8C (+7.16F) : SOL. IN WATER: 20C. 0.25 WT. % @ 1 ATM
VAP PRESS: 2524 MMHG @ 20C : SP. GRAVITY: 0.9104 @ 20/20C, 68F
VAP DENSITY (AIR=1): 2.15 : % VOLATILE BY VOL: 100
APPEARANCE AND ODOR: COLORLESS GAS OR LIQUID UNDER PRESSURE - FAINT,

SECTION 2

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: -76C (-108.4F) : FLAMMABLE LIMITS (STP IN AIR)
METHOD USED: CLEVELAND OPEN CUP : LFL: 3.6 VOL. % UFL: 33.0 VOL %
EXTINGUISHING MEDIA: FOR CONTAINMENT OF FIRE AND PROTECTION OF
SURROUNDING EQUIPMENT ONLY. WATER FUG, FOAM, CO2, DRY CHEMICAL.
SPECIAL FIRE FIGHTING EQUIPMENT AND HAZARDS: SELF-CONTAINED BREATHING
APPARATUS. VAPORS CAN FORM FLAMMABLE MIXTURES WITH AIR AT ALL
NORMAL AMBIENT TEMPERATURES. ALL SOURCES OF POSSIBLE IGNITION
SHOULD BE AVOIDED IN AREAS WHERE VINYL CHLORIDE VAPORS ARE PRESENT.
IGNITION TEMPERATURE 472C (882F).

SECTION 3

REACTIVITY DATA

STABILITY: AVOID EXPOSURE TO AIR, OXYGEN, SUNLIGHT, MOISTURE, AND
ALL SOURCES OF HEAT OR IGNITION. IGNITES IN AIR AT 472C (882F).
INCOMPATIBILITY: OXIDIZING MATERIAL, COPPER OR COPPER ALLOYS, ALUMINUM
OR ALUMINUM ALLOYS.
HAZARDOUS DECOMPOSITION PRODUCTS: HYDROGEN CHLORIDE, CARBON MONOXIDE.
HAZARDOUS POLYMERIZATION: MAY OCCUR. AVOID EXPOSURE TO
OXYGEN (AIR), HEAT, SUNLIGHT, MOISTURE, AND FREE RADICAL INITIATORS
OR OTHER CATALYTIC IMPURITIES.

SECTION 4

SPILL, LEAK, AND DISPOSAL PROCEDURES

ACTION TO TAKE FOR SPILLS (USE APPROPRIATE SAFETY EQUIPMENT): REMOVE
ALL SOURCES OF IGNITION; SUPPLY AMPLE VENTILATION, ALLOW ONLY
PROPERLY PROTECTED PERSONNEL INTO THE AREA; DO NOT ALLOW VINYL
CHLORIDE TO ENTER THE SEWER SYSTEM BECAUSE OF EXPLOSIVE HAZARD.

(CONTINUED ON PAGE 2)

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SECTION 4 SPILL, LEAK, AND DISPOSAL PROCEDURES (CONTINUED)

DISPOSAL METHOD: INCINERATE IN EQUIPMENT WITH A HYPOCHLORIC ACID
SCUMBER ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS. CONTACT
THE DOW CHEMICAL COMPANY FOR ADDITIONAL HELP.

SECTION 5 HEALTH HAZARD DATA

INGESTION: NOT CONSIDERED A PROBLEM BECAUSE PRODUCT IS A GAS AT AMBIENT
TEMPERATURES.
EYE CONTACT: GAS - NOT LIKELY TO CAUSE ILL EFFECTS. LIQUID - CAPABLE OF
CAUSING FROSTBITE-TYPE BURNS.
SKIN CONTACT: GAS - NOT LIKELY TO CAUSE IRRITATION.
LIQUID - CAPABLE OF CAUSING FROSTBITE-TYPE BURNS.
SKIN ABSORPTION: NOT ABSORBED THROUGH SKIN IN PURE FORM.
INHALATION: OSHA STANDARD TWA - 1 PPM (1977). MAXIMUM AVERAGE OVER
ANY 15 MINUTE PERIOD - 5 PPM; ACGIH TLV 5 PPM.
EFFECTS OF OVEREXPOSURE: CANCER SUSPECT AGENT.

SECTION 6 FIRST AID--NOTE TO PHYSICIAN

FIRST AID PROCEDURES:

EYES: IRRIGATE WITH FLOWING WATER IMMEDIATELY AND CONTINUOUSLY FOR
15 MINUTES. REFER TO MEDICAL PERSONNEL.
SKIN: WASH IN FLOWING WATER (SHOWER) FOR 15 MINUTES. REMOVE CLOTHES
AND DECONTAMINATE BEFORE REUSE.
INHALATION: REMOVE TO FRESH AIR. MAY CAUSE DRUNKENNESS OR LOSS OF
CONSCIOUSNESS. GIVE MOUTH TO MOUTH RESUSCITATION IF BREATHING STOPS.
CALL A PHYSICIAN AND/OR TRANSPORT TO MEDICAL FACILITY.
INGESTION: UNLIKELY, SINCE PRODUCT IS A GAS AT AMBIENT TEMPERATURES.
NOTE TO PHYSICIAN: EXPOSURE TO HIGH LEVELS OF SHORT DURATION CAN CAUSE
NARCOTIC OR INTOXICATIVE EFFECTS AND/OR ANESTHESIA. MAY CAUSE
NAUSEA OR VOMITING. LONG-TERM EFFECTS: HAS BEEN FOUND TO BE
CARCINOGENIC, (REPEATED EXPOSURE TO HIGH LEVELS).

SECTION 7 SPECIAL HANDLING INFORMATION

VENTILATION: RECOMMEND CONTROL OF VAPORS TO SUGGESTED GUIDE.
RESPIRATORY PROTECTION: NIOSH APPROVED RESPIRATORY PROTECTION REQUIRED
IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. FOR EMERGENCIES, A SELF-
CONTAINED BREATHING APPARATUS OR A FULL-FACE RESPIRATOR AS APPROVED
BY NIOSH IS RECOMMENDED.
PROTECTIVE CLOTHING: NONE REQUIRED. RESCUE HARNESS AND LIFELINE FOR
ENTERING TANKS OR ENCLOSED STORAGE SPACE.
EYE PROTECTION: SAFETY GLASSES WITHOUT SIDE SHIELDS. EYEWASH STATIONS
AND SAFETY SHOWERS SHOULD BE READILY AVAILABLE.

(CONTINUED ON PAGE 3)

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M A T E R I A L S A F E T Y D A T A S H E E T PAGE: 3
DOW CHEMICAL U.S.A. MIDLAND MICHIGAN 48640 EMERGENCY PHONE: 517-636-4400

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SECTION 8 SPECIAL PRECAUTIONS AND ADDITIONAL INFORMATION

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORAGE SHOULD BE IN
AN ISOLATED, WELL-VENTILATED AREA. PITS, DEPRESSIONS, AND BASEMENTS
SHOULD BE AVOIDED.

AVOID ALL SKIN AND EYE CONTACT. AVOID BREATHING VAPORS. VINYL
CHLORIDE SHOULD ALWAYS BE HANDLED WITH FULL RECOGNITION OF ITS
VOLATILITY AND ITS FLAMMABILITY. KEEP THE MATERIAL ENCLOSED AND
ELIMINATE ALL SOURCES OF IGNITION.

ADDITIONAL INFORMATION: 27 JUN 80 REVISIONS OF 05 OCT 78 --
SECTIONS 3, AND 5.

LAST PAGE

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