



MSDS for **ACETIC ACID, 56%-58%**

PRODUCT IDENTIFICATION

PRODUCT NAME: ACETIC ACID 56%-58%
FORMULA: CH3COOH IN H2O
CAS NO.: 00064-19-7
NIOSH/RTECS NO.: AF1225000
PRODUCT CODES: 4706
EFFECTIVE: 08/28/86
Reviewed December 2009
REVISION #02

General Information

Company's Name: Borden & Remington (BOREMCO)
Company's Street: 63 Water St
Company's City: Fall River
Company's State: MA
Company's Emerg Ph #: 508-675-0096;CHEMITREC:800-924-4300
Company's Info Ph #: ADDITIONAL INFO:508-675-0096

PRECAUTIONARY LABELLING

NFPA SYSTEM

| | |
|---------------------|-------------------------------|
| HEALTH | - 2 MODERATE |
| FLAMMABILITY | - 2 MODERATE |
| REACTIVITY | - 2 MODERATE |
| CONTACT | - 3 SEVERE (CORROSIVE) |

HAZARD RATINGS ARE 0 TO 4 (0 = NO HAZARD; 4 = EXTREME HAZARD).

EXPOSURE LIMITS

OSHA/TWA 10 PPM
IDLH 50PPM

PROTECTIVE EQUIPMENT

PREVENT CONTACT WITH SKIN AND EYES
USE **NEOPRENE** CHEMICAL RESISTANT GLOVES, BOOTS, SUITS
GOGGLES & SHIELD
FOR ATMOSPHERES > 50 PPM
FULL FACE CARTRIDGE RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE

PRECAUTIONARY LABEL STATEMENTS

DANGER
COMBUSTIBLE
CAUSES SEVERE BURNS
HARMFUL IF SWALLOWED OR INHALED
KEEP AWAY FROM HEAT, SPARKS, FLAME. DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID BREATHING VAPOR. KEEP IN TIGHTLY CLOSED CONTAINER. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. IN CASE OF FIRE, USE WATER SPRAY,
ALCOHOL FOAM, DRY CHEMICAL, OR CARBON DIOXIDE. FLUSH SPILL AREA WITH WATER SPRAY

HAZARDOUS COMPONENTS

| COMPONENT | % | CAS NO. |
|----------------------|-------|---------|
| ACETIC ACID, GLACIAL | 56-58 | 64-19-7 |

PHYSICAL DATA

| | |
|---|-----------------------------------|
| BOILING POINT: 107-118 C | VAPOR PRESSURE(MM HG): 13-14 mmHg |
| MELTING POINT: < 16 C | VAPOR DENSITY(AIR=1): < 2.07 |
| SPECIFIC GRAVITY: 1.06 | EVAPORATION RATE: N/A (H2O=1) |
| (BUTYL ACETATE=1) | |
| SOLUBILITY(H2O): COMPLETE (IN ALL PROPORTIONS) % VOLATILES BY VOLUME: 100 | |
| APPEARANCE & ODOR: CLEAR, COLORLESS SOLUTION WITH A VINEGAR ODOR. | |

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (OPEN CUP): > 140 F
FLAMMABLE LIMITS: UPPER not determined LOWER - not determined

FIRE EXTINGUISHING MEDIA

USE WATER SPRAY, ALCOHOL FOAM, DRY CHEMICAL OR CARBON DIOXIDE.
SPECIAL FIRE-FIGHTING PROCEDURES
FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-
CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN
POSITIVE PRESSURE MODE.
MOVE CONTAINERS FROM FIRE AREA IF IT CAN BE DONE WITHOUT RISK. USE
WATER TO KEEP FIRE-EXPOSED CONTAINERS COOL.

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UNUSUAL FIRE & EXPLOSION HAZARDS

GIVES OFF FLAMMABLE VAPORS. VAPORS MAY FORM EXPLOSIVE MIXTURE WITH
AIR. CLOSED CONTAINERS EXPOSED TO HEAT MAY EXPLODE. CONTACT WITH
STRONG OXIDIZERS MAY CAUSE FIRE.

TOXIC GASES PRODUCED

ACETIC ACID, CARBON MONOXIDE, CARBON DIOXIDE

HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV/TWA): 25 MG/M3 (10 PPM)
SHORT-TERM EXPOSURE LIMIT (STEL): 37 MG/M3 (15 PPM)
PERMISSIBLE EXPOSURE LIMIT (PEL): 25 MG/M3 (10 PPM)

TOXICITY: LD50 (ORAL-RAT)(MG/KG) - 3310
LD50 (IV-MOUSE) (MG/KG) - 525
LD50 (SKIN-RABBIT)(MG/KG) - 1060
LC50 (INHL-MOUSE) (PPM) - 5620

CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG: NO

EFFECTS OF OVEREXPOSURE

INHALATION OF VAPORS MAY CAUSE SEVERE IRRITATION OF THE RESPIRATORY
SYSTEM. LIQUID MAY CAUSE SEVERE BURNS TO SKIN AND EYES.
LIQUID MAY CAUSE PERMANENT EYE DAMAGE.
INGESTION MAY CAUSE SEVERE BURNING OF MOUTH AND STOMACH.
INGESTION MAY CAUSE NAUSEA, VOMITING AND LOSS OF CONSCIOUSNESS.
CHRONIC OVEREXPOSURE MAY RESULT IN LUNG DAMAGE.

TARGET ORGANS

RESPIRATORY SYSTEM, EYES, SKIN, TEETH

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
NONE IDENTIFIED

ROUTES OF ENTRY

INHALATION, INGESTION, SKIN CONTACT, EYE CONTACT

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EMERGENCY AND FIRST AID PROCEDURES

CALL A PHYSICIAN IF SWALLOWED, **DO NOT INDUCE VOMITTING**; IF CONSCIOUS, GIVE WATER, MILK, OR MILK OF MAGNESIA. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. WASH CLOTHING BEFORE RE-USE.

REACTIVITY DATA

STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: COLD, HEAT, FLAME, OTHER SOURCES OF IGNITION

INCOMPATIBLES: ALKALIES, CARBONATES, STRONG BASES,
STRONG OXIDIZING AGENTS,

MOST COMMON METALS(EXCEPT ALUMINUM),
CHROMIC ACID,

NITRIC ACID, HYDROGEN PEROXIDE, SULFURIC ACID

DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE

SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE

WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. SHUT OFF IGNITION SOURCES; NO FLARES, SMOKING, OR FLAMES IN AREA. STOP LEAK IF YOU CAN DO SO WITHOUT RISK. NEUTRALIZE SPILL WITH SODA ASH OR LIME. WITH CLEAN SHOVEL, CAREFULLY PLACE MATERIAL INTO CLEAN, DRY CONTAINER AND COVER. REMOVE FROM SPILL AREA. FLUSH AREA WITH WATER.

"LOW NA+" ACID NEUTRALIZERS SORBANTS ARE RECOMMENDED FOR SPILLS OF THIS PRODUCT.

DISPOSAL PROCEDURE

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

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EPA HAZARDOUS WASTE NUMBER: D001, D002 (IGNITABLE, CORROSIVE WASTE)

STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA(TM) STORAGE COLOR CODE: RED (FLAMMABLE)

SPECIAL PRECAUTIONS

KEEP CONTAINER TIGHTLY CLOSED. STORE IN CORROSION-PROOF AREA.

TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)
PROPER SHIPPING NAME ACETIC ACID, SOLUTION
HAZARD CLASS CORROSIVE MATERIAL (LIQUID)
UN/NA UN2790
LABELS CORROSIVE
REPORTABLE QUANTITY 5000 LBS. FEDERAL

INTERNATIONAL (I.M.O.)
PROPER SHIPPING NAME ACETIC ACID, SOLUTION
HAZARD CLASS 8
UN/NA UN2790
LABELS CORROSIVE