

MATERIAL SAFETY DATA SHEET

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PRODUCT: QUATRICIDE® PV
EPA Reg. # 47371-131-8714

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CAS # MIXTURE
CHEMICAL NAME: MIXTURE

Health-3 Fire-1 Reactivity-0
DOT HAZARD CLASS: Non-hazardous
DOT SHIPPING DESCRIPTION:
DISINFECTANTS, NOI
NMFC ITEM#57100, SUB 3

MANUFACTURER:

PHARMACAL RESEARCH LABS, INC.
562 Captain Neville Drive
Waterbury, CT 06705

EMERGENCY TELEPHONE NUMBERS:
CHEMTREC 1-800-424-9300
IN CANADA CALL CANUTEC 1-613-996-6666

I. COMPONENTS AND HAZARD INFORMATION

COMPONENTS	CAS NO. OF COMPONENTS	APPROXIMATE WEIGHT %
N,N- Didecyl-N,N- Dimethylammonium Chloride	7173-51-5	2.54
N-Alkyl (C ₁₄ 50%, C ₁₂ 40%, C ₁₆ 10%) dimethyl-N-benzylammonium chloride	8001-54-5	1.69

WARNING STATEMENTS
DANGER.

II. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: yellow liquid
pH 7.2 - 8.2
ODOR: No fragrances added
SPECIFIC GRAVITY (water = 1) 1.0
VISCOSITY <100 cps @ 25°C
BOILING POINT: Not known

VAPOR DENSITY (Air = 1) Not known
VAPOR PRESSURE (mm Hg) Not known
PERCENT VOLATILE (by weight) 94.2
EVAPORATION RATE (Butyl Acetate = 1) Not known
SOLUBILITY IN WATER: Soluble
MELTING OR FREEZING POINT: Not known

III. FIRE AND EXPLOSION INFORMATION

FLASH POINT > 200°F
AUTO IGNITION TEMPERATURE: Not known
EXTINGUISHING MEDIA: WATER, FOAM, CO₂, DRY CHEMICAL

LOWER EXPLOSION LIMIT (%) N/A
UPPER EXPLOSION LIMIT (%) N/A

SPECIAL FIRE FIGHTING PROCEDURES:
MUST wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing.
Cool fire exposed containers with water spray.

UNUSUAL FIRE & EXPLOSION HAZARDS:
Products of combustion are toxic.

IV. EMERGENCY FIRST AID PROCEDURES & HEALTH EFFECTS

PRIMARY ROUTES OF ENTRY: EYE CONTACT, SKIN CONTACT, AND INHALATION

EMERGENCY FIRST AID

EYES:	<ul style="list-style-type: none">• Immediately flush eye with large amounts of water for 15 - 20 minutes.• Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water.• Get immediate medical attention.• If physician not available, flush for additional 15 minutes and then transport victim to medical care.
SKIN:	<ul style="list-style-type: none">• Wash with large amounts of running water, and soap if available, for 15 - 20 minutes.• Remove contaminated clothing and shoes• Get immediate medical attention.• Wash all contaminated clothing before reuse.
INHALATION:	<ul style="list-style-type: none">• Move to fresh air.• Use oxygen or artificial respiration if needed.• GET MEDICAL ATTENTION.
INGESTION:	<ul style="list-style-type: none">• Immediately give 3-4 glasses of milk (if unavailable, give water)• Do NOT induce vomiting.• If vomiting occurs, give fluids again• GET MEDICAL ATTENTION.• Do not give anything by mouth to a convulsing or unconscious person.
Note to physician:	<ul style="list-style-type: none">• Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

EFFECTS OF OVEREXPOSURE / SIGNS AND SYMPTOMS OF EXPOSURE:

CONTACT WITH EYES OR SKIN CAUSES SEVERE IRRITATION AND/OR BURNS. . VAPORS OR MIST MAY IRRITATE RESPIRATORY PASSAGES / MUCOUS MEMBRANES. INGESTION CAN PRODUCE IMMEDIATE BURNING PAIN IN THE MOUTH, THROAT AND ABDOMEN, SEVERE SWELLING OF THE LARYNX, CIRCULATORY SHOCK, AND/OR CONVULSIONS.

V. TOXICOLOGY

NO SPECIFIC INFORMATION IS AVAILABLE THE FOLLOWING INFORMATION IS ON CLOSELY RELATED PRODUCTS

LONZA FORMULATION S-38 CONTAINING 3.8 % ACTIVE QUAT

ORAL LD 50 (RAT): 1850 MG/KG

DERMAL LD50 (RABBIT): 4430 MG/KG

EYE IRRITATION (RABBIT - 1:64 DILUTION) ESSENTIALLY NON-IRRITATING

SKIN IRRITATION (RABBIT - 1:64 DILUTION) NON-IRRITANT

LONZA FORMULATION S-23 CONTAINING 4.0 % ACTIVE QUAT

EYE IRRITATION (RABBIT): SEVERE EYE IRRITANT

LONZA FORMULATION S-21 CONTAINING 5.5 % ACTIVE QUAT

SKIN CORROSIVITY (DOT METHOD): NOT CORROSIVE

VI. HAZARDS

COMPONENTS	CAS NO. OF COMPONENTS	HAZARD CATEGORIES
N,N- Didecyl-N,N-Dimethylammonium Chloride	7173-51-5	A
N-Alkyl (C₁₄ 50%, C₁₂ 40%, C₁₆ 10%) dimethyl-N-benzylammonium chloride	8001-54-5	A

F = FIRE HAZARD

S = SUDDEN RELEASE OF PRESSURE

R = REACTIVE

A = IMMEDIATE (ACUTE) HEALTH HAZARD

C = DELAYED (CHRONIC) HEALTH HAZARD

VII. REACTIVITY

STABILITY: STABLE

HAZARDOUS POLYMERIZATION WILL NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION MAY PRODUCE TOXIC VAPORS OF HYDROGEN CHLORIDE, AMINES, AND OXIDES OF CARBON AND NITROGEN
CONDITIONS TO AVOID: STRONG OXIDIZING OR REDUCING AGENTS

VIII. SPILL, LEAK, AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: CONTAIN ALL SPILLS AND LEAKS TO PREVENT DISCHARGE TO THE ENVIRONMENT. VENTILATE AREA. RECOVER LIQUID AND DISPOSE WASTE MATERIAL IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS. DO NOT DISCHARGE TO SEWER SYSTEM WITHOUT NOTIFYING THE LOCAL SEWAGE TREATMENT PLANT.

"EMPTY" CONTAINER WARNINGS:

DO NOT REUSE EMPTY CONTAINER. TRIPLE RINSE WITH WATER - DISPOSE OF INCONFORMANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

FOR 1 GALLON OR LESS

Keep product under locked storage, inaccessible to small children. Do not reuse empty container. Rinse thoroughly, securely wrap empty container in several layers of newspaper, and discard in trash or recycle.

FOR GREATER THAN ONE GALLON

Do not contaminate water, food, or feed by storage or disposal

PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance

IX. PROTECTION AND PRECAUTIONS

VENTILATION:

GOOD VENTILATION

RESPIRATORY PROTECTION:

NIOSH/MSHA APPROVED RESPIRATOR IF THERE IS A REASONABLE POSSIBILITY OF EXPOSURE TO VAPORS OR FUMES

PROTECTIVE GLOVES:

RUBBER OR NEOPRENE

EYE PROTECTION:

CHEMICAL SPLASH GOGGLES OR FACESHIELD

PERSONAL HYGIENE:

DO NOT GET INTO EYES, ON SKIN OR CLOTHING - WASH THOROUGHLY AFTER USE

X. TRANSPORTATION INFORMATION

TRANSPORTATION INCIDENT INFORMATION:

- AVOID OVERHEATING OR FREEZING
- STORE IN COOL WELL VENTILATED AREA

SHIPPING DESCRIPTION: DISINFECTANTS, NOI, ITEM # 57100, SUB 3

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THE HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) AND NATIONAL FIRE PROTECTION ASSOCIATION RATINGS HAVE BEEN INCLUDED BY PHARMACAL RESEARCH LABORATORIES INC. IN ORDER TO PROVIDE ADDITIONAL HEALTH AND HAZARD INFORMATION. THE RATINGS RECOMMENDED ARE BASED UPON CRITERIA SUPPLIED BY THE DEVELOPERS OF THESE RATING SYSTEMS, TOGETHER WITH PHARMACAL'S INTERPRETATION OF THE AVAILABLE DATA