

# MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-144/144-33-2.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**

144-33-2

**Code:**

M

**RTECS:**

GE7500000

**Code:**

M

**Name:**

CITRIC ACID DISODIUM SALT

**Other REC Limits:**

NONE RECOMMENDED

**OSHA PEL:**

NOT ESTABLISHED

**Code:**

M

**OSHA STEL:****Code:**

2

**ACGIH TLV:**

NOT ESTABLISHED

**Code:**

M

**ACGIH STEL:**

N/P

**Code:**

## Control Measures

**Respiratory Protection:**

NONE SPECIFIED BY MANUFACTURER.

**Ventilation:**

PROVIDE LOCAL EXHAUST VENTILATION IN SUFFICIENT VOLUME AND PATTERN SO AS TO MAINTAIN EXPOSURES BELOW TLVs.

**Protective Gloves:**

LATEX GLOVES.

**Eye Protection:**

CHEMICAL SAFETY GOGGLES.

**Other Protective Equipment:**

Equipment NONE

**Work Hygienic Practices:**

WASH HANDS THOROUGHLY AFTER HANDLING THIS MATERIAL.

**Supplemental Safety and Health:**

NONE 5

## Health Hazards Data

**LD50/LC50 Mixture:**

ACUTE ORAL RAT LD50: 6,700 MG/KG

**Route Of Entry Inds - Inhalation:**

YES

**Skin:**

YES

**Ingestion:**

YES

**Carcinogenicity Inds - NTP:**

NO

**IARC:**

NO

**OSHA:**

NO

**Health Hazards Acute And Chronic:**

INGESTION & INHALATION- HYPERSENSITIVITY REACTIONS. HEMOLYTIC ANEMIA, NERTROOPENIA, LEUKOPENIA ADN THROMBOCYENIA. ADVERSE GASTROINTESTINAL REACTIONS. SKIN- ALLERGIC REACTION. EYES- NO INFORMATION. OTHER- INTRAVENOUS OR INTRAMUSCULAR ADMINISTRATION HAS CAUSED ADVERSE RENAL AND HEPATIC EFFECTS.

**Explanation Of Carcinogenicity:**

NOT APPLICABLE

**Signs And Symptoms Of Overexposure:**

3 INGESTION & INHALATION- HYPERSENSITIVITY REACTIONS MAY INCLUDE RASH, FEVERE, EOSINOPHILIA, PRURITUS AND SERUM SICKNESS. FEVER, CHILLS AND MYALGIA. ANAPHYLAXIC WHICH INVOLVES DIFFICULTY IN BREATHING, R ESPIRATORY DISTRESS AND MAY BE FATAL. NAUSEA, VOMITING, EPIGASTRIC DISTRESS, LOOSE STOOLS, DIARRHEA AND FLATULENCE.

**Medical Cond Aggravated By Exposure:**

HYPERSENSITIVITY TO ANY PENICILLIN; GASTROINTESTINAL DISEASE; HEPATIC DISORDERS; HEMATOLOGIC DISORDERS; RENAL DISORDERS.

**First Aid:**

EYES: FLUSH WITH RUNNING WATER FOR 15 MINUTES WHILE LIFTING EYELIDS. GET MEDICAL ATTENTION. SKIN: FLUSH WITH WATER. INHALATION: REMOVE VICTIM TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS RE QUIRED. INGESTION: IF CONSCIOUS, INDUCE VOMITING IF INGESTION HAS OCCURRED WITHIN THREE HOURS.

**Spill Release Procedures:**

WEARING SUITABLE PROTECTIVE CLOTHING, SWEEP MATERIALONTO PAPER AND PLACE INTO AN APPROPRIATE FIBER DRUM FOR DISPOSAL. THE SPILL AREA SHOULD BE VENTILATED AND DECONTAMINATED AFTER MATERIAL HAS BEEN PIC KED UP.

**Neutralizing Agent:**

N/R

**Waste Disposal Methods:**

DISPOSE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

**Handling And Storage Precautions:**

IF VIALS BREAK OR MATERIAL HAS SPILLED, WORKERS SHOULD AVOID SKIN OR EYE CONTACT WITH, AND INHALATION OF, THIS MATERIAL.

**Other Precautions:**

NONE

## Fire and Explosion Hazard Information

**Flash Point Method:**

N/P

**Flash Point:****Flash Point Text:**

NOT APPLICABLE

**Autoignition Temp:****Autoignition Temp Text:**

N/R 4

**Lower Limits:**

N/R

**Upper Limits:**

N/R

**Extinguishing Media:**

USE WATER.

**Fire Fighting Procedures:**

WEAR A NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE EQUIPMENT WHEN FIGHTING FIRES. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

**Unusual Fire/Explosion Hazard:**

FINE DUST MAY FORM AN EXPLOSION HAZARD. MOVE CONTAINERS OF CHEMICALS FROM FIRE AREA IF SAFE TO DO SO.

## Physical/Chemical Properties

**HCC:**

N1

**NRC/State Lic No:**

Net Prop WT for Ammo:

**Boiling Point:****B.P. Text:**

N/R

**Melt/Freeze Pt:****M.P./F.P. Text:**

N/R

**Decomp Temp:****Decomp Text:**

N/R

**Vapor Pres:**

N/R

**Vapor Density:**

N/R

**Volatile Org Content %:****Spec Gravity:**

N/R

**VOC Pounds/Gallon:****PH:**

N/R

**POC:**

N/R

**Viscosity:**

N/P

**Evaporation Rate & Reference:**

N/R

**Solubility in Water:**

SOLUBLE

**Vials Containing Fine, White, Crystalline Powder. Practically Odorless.****Percent Volatiles by Volume:**

N/R

**Corrosion Rate:**

N/R

**Extinguishing Media:**

USE WATER.

**Fire Fighting Procedures:**

WEAR A NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE EQUIPMENT WHEN FIGHTING FIRES. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

**Unusual Fire/Explosion Hazard:**

FINE DUST MAY FORM AN EXPLOSION HAZARD. MOVE CONTAINERS OF CHEMICALS FROM FIRE AREA IF SAFE TO DO SO.

## Reactivity Data

**Stability Indicator:**

YES

**Stable Under Normal Conditions:**

STABLE UNDER NORMAL CONDITIONS.

**Materials To Avoid:**

ACIDS, ALKALI HYDROXIDES, GLYCERIN, OXIDIZING AGENTS.

**Hazardous Decomposition Products:**

OXIDES OF CARBON, NITROGEN AND SULFUR.

**Hazardous Polymerization Indicator:**

NO

**Conditions To Avoid Polymerization:**

NOT APPLICABLE

**Reactivity Data:**

NO REACTIONS.

## Toxicological Information

**Information:**

N/P

**Information:**

N/P

## Regulatory Information

**Sara Title III Information:**

N/P

**Federal Regulatory Information:**

N/P

**State Regulatory Information:**

N/P

## Other Information

**Other Information:**

N/P

**Information:**

&lt;