



chemists helping chemists in research & industry

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DATE: 09/26/9
CUST#: 250651
PO#: 30464

M A T E R I A L S A F E T Y D A T A S H E E T

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IDENTIFICATION

PRODUCT #: 22954-7
CAS #: 16774-21-3
MF: H8CEN8018

NAME: AMMONIUM CERTIUM(IV) NITRATE, 99.99%

TOXICITY HAZARDS

NO TOXICITY DATA AVAILABLE

HEALTH HAZARD DATA

ACUTE EFFECTS

MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.
CAUSES EYE AND SKIN IRRITATION.
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

FIRST AID

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS
AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED
CLOTHING AND SHOES.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.

WASH CONTAMINATED CLOTHING BEFORE REUSE.

PHYSICAL DATA

APPEARANCE AND ODOR
ORANGE CRYSTALS

FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA

WATER SPRAY.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.

STRONG OXIDIZER.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

REACTIVITY DATA

INCOMPATIBILITIES

STRONG REDUCING AGENTS
FINELY POWDERED METALS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
NITROGEN OXIDES

CONTINUED ON NEXT PAGE

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----- SPILL OR LEAK PROCEDURES -----

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
COVER WITH DRY LIME OR SODA ASH, PICK UP, KEEP IN A CLOSED CONTAINER AND HOLD FOR WASTE DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

WASTE DISPOSAL METHOD

THE MATERIAL SHOULD BE DISSOLVED IN 1) WATER; 2) ACID SOLUTION OR 3) OXIDIZED TO A WATER-SOLUBLE STATE. PRECIPITATE THE MATERIAL AS THE SULFIDE, ADJUSTING THE PH OF THE SOLUTION TO 7 TO COMPLETE PRECIPITATION. FILTER THE INSOLUBLES AND DISPOSE OF THEM IN A HAZARDOUS-WASTE SITE. DESTROY ANY EXCESS SULFIDE WITH SODIUM HYPOCHLORITE. NEUTRALIZE THE SOLUTION BEFORE FLUSHING DOWN THE DRAIN.
OBSERVE ALL FEDERAL, STATE, AND LOCAL LAWS.

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
USE ONLY IN A CHEMICAL FUME HOOD.
SAFETY SHOWER AND EYE BATH.
AVOID BREATHING DUST.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
IRRITANT.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM COMBUSTIBLE MATERIALS, HEAT, SPARKS, AND OPEN FLAME.
STORE IN A COOL DRY PLACE.

----- ADDITIONAL PRECAUTIONS AND COMMENTS -----

ADDITIONAL INFORMATION

A MIXTURE OF ALUMINUM POWDER, WATER AND METAL NITRATE MAY EXPLODE DUE TO A SELF-ACCELERATING REACTION. MIXTURES OF METAL NITRATES WITH ALKYL ESTERS MAY EXPLODE, OWING TO THE FORMATION OF ALKYL NITRATES. MIXTURES OF A NITRATE WITH PHOSPHOROUS, TIN (2) CHLORIDE OR OTHER REDUCING AGENTS MAY REACT EXPLOSIVELY. MIXTURES OF METAL NITRATES AND PHOSPHINATES EXPLODE ON HEATING. MIXTURES CONTAINING NITRATES, NITRITES, AND ORGANIC MATERIALS ARE POTENTIALLY DANGEROUS, ESPECIALLY IN THE PRESENCE OF ACIDIC MATERIALS AND HEAVY METALS. INCOMPATIBLE WITH: CYANIDES, THIOCYANATES, ISOTHIOCYANATES, HYPOPHOSPHITES.

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