

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-646/64612-24-4.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
64612-24-4

**Code:**  
M

**RTECS:**

**Code:**  
X

**Name:**  
ORTHOBORIC ACID CMPD W/2,2-IMINOBI(ETHANOL)

**Other REC Limits:**  
NONE RECOMMENDED

**OSHA PEL:**  
NOT ESTABLISHED

**Code:**  
M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**  
NOT ESTABLISHED

**Code:**  
M

**ACGIHSTEL:**  
N/P

**Code:**

## Control Measures

**Respiratory Protection:**  
GOOD INDUSTRIAL HYGIENE PRACTICES RECOMMENDED THAT ENGINEERING CONTROLS BE USED TO REDUCE ENVIRO CONCEN TO TLV/PEL.IF ANY ASOC TLV/PEL EXCEEDED PROVIDE NIOSH APPROVED RESPIRATORY PROTECTION.

**Ventilation:**  
NONE SPECIFIED BY MANUFACTURER.

**Protective Gloves:**  
IMPERVIOUS GLOVES SUCH AS RUBBER

**Eye Protection:**  
SAFETY GLASSES W/SIDE SHIELD,CHEM GOGG

**Other Protective Equipment:**  
Equipment EYEWASH FACILITY.APPROPRIATE CLOTHING TO AVOID SKIN CONTACT.

**Work Hygienic Practices:**  
WASH CONTAMIN CLOTH BEF REUSE.

**Supplemental Safety and Health:**  
PH(DILUTE)=8.3-8.7 @5%. HEALTH W/AMINES POT FOR FORMING NITROSAMINES-ANIMAL CARC.THEREFORE NO NITRITES/RELATED NITROSATING AGENTS SHOULD BE ADDED.CONTAINS DIETHANOLAMINE-LAB ANIMALS CAUSE ANEMIA,EFFEC TS KIDNEY,LIVER,HEART/CNS EFFECTS.

## Health Hazards Data

**LD50LC50Mixture:**  
TLV FOR PRODUCT NE.LD50 RAT,ORAL >5.G/KG

**Route Of Entry Inds - Inhalation:**  
YES

**Skin:**  
YES

**Ingestion:**  
YES

**Carcinogenicity Inds - NTP:**  
NO

**IARC:**  
NO

**OSHA:**  
NO 2

**Health Hazards Acute And Chronic:**  
EYE:CONCEN MAY CAUSE IRRIT.RECOMMENDED USE DILUTIONS(10% OR LESS)NOT EXPECTED TO CAUSE IRRIT.SKIN ABSORPTION:CONCEN NOT EXPECTED TO BE TOXIC.SKIN:CONCEN NOT EXPECTED TO CAUSE IRRIT.INHAL:MIST OF CONCE N & DILUTIONS MAY CAUSE RESP IRRIT.INGEST:CONCEN NOT EXPECTED TO BE TOXIC.CHRONIC:CONTAIN ALKANOLAMINE.WORK FLUIDS (SUP)

**Explanation Of Carcinogenicity:**  
PER MSDS:CONTAINS KNOWN CARCINOGENS:NO, NTP/IARC/OSHA:NO.

**Signs And Symptoms Of Overexposure:**  
EYE IRRIT , SKIN IRRIT , RESP IRRIT.

**Medical Cond Aggravated By Exposure:**  
NONE SPECIFIED BY MANUFACTURER.

**First Aid:**  
EYE:FLUSH W/PLENTY OF WATER.GET EMD ATTN IR. IRRIT PERSISTS.SKIN:FLUSH W/PLENTY OF WATER.REMOVE CONTAMIN CLOTH.GET MED ATTN IF IRRIT PERSISTS.INHAL:RESP DISCOMFOT/IRRIT OCCURS MOVE TO FRESH AIR.SEE DR IF DISCOMFORT/IRRIT CONTINUES.INGEST:INDUCE VOMIT IMMED AS DIRECTED BY MED PERSONNEL.NEVER GIVE ANYTHING BY MOUTH IF UNCONSCIOUS.

**Spill Release Procedures:**  
ABSORB W/INERT MATL(DRY SAND,EARTH),PLACE IN CHEM WASTE CNTNR.FLUSH RESIDUAL SPILL W/WATER.FOR LG SPILLS DIKE FOR LATER DISPO.

**Neutralizing Agent:**  
NONE SPECIFIED BY MANUFACTURER.

**Waste Disposal Methods:**  
DISPOSE OF IN ACCORDANCE IWTH LOCAL, STATE AND FEDERAL REGULATIONS.DISPOSAL OF MATL TO LAND MAY BE BANNED BY FED LAW(40CFR268).PROD DOESNT FALL UNDER CURRENT EPA ECRA DEFINITIONS OF HAZ WASTE.CONTAINS NO CERCLA REG MATLS.CONTAINS SARA SEC 313 CHEM.

**Handling And Storage Precautions:**  
AVOID CONTACT W/EYES.AVOID BREATH MISTS.DO NOT TAKE INTERNALLY.KEEP CNTNR CLSD WHEN NOT IN USE.BRING PRODUCT TO ROOM TEMP BEFORE USE.

**Other Precautions:**  
DO NOT CUT/WELD EMPTY DRUMS UNLESS THOROUGHLY CLEANED.

## Fire and Explosion Hazard Information

**Flash Point Method:**

**Flash Point:**

**Flash Point Text:**  
NA

**Autoignition Temp:**

**Autoignition Temp Text:**  
NP

**Lower Limits:**  
NA

**Upper Limits:**  
NA

**Extinguishing Media:**  
WATER, DRY CHEMICAL, CO2, ALCOHOL FOAM.

**Fire Fighting Procedures:**  
WEAR SELF-CONTAINED BREATHING APPARATUS WHEN FIRE-FIGHTING IN CONFINED SPACE.COOL FIRE-EXPO CNTNRS W/WATERSPRAY TO PREVENT RUPTURE. 3

**Unusual Fire/Explosion Hazard:**  
NONE KNOWN.

## Physical/Chemical Properties

**HCC:**  
V6

**NRC/State LIC No:**  
N/R

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**  
212F,100C

**Melt/Freeze Pt:**

**M.P/F.P Text:**  
NA

**Decomp Temp:**

**Decomp Text:**  
NP

**Vapor Pres:**  
NA

**Vapor Density:**  
1

**Volatile Org Content %:**

**Spec Gravity:**  
1.035

**VOC Pounds/Gallon:**

**PH:** 9-9.4

**VOC Grams/Liter:**

**Viscosity:**  
NP

**Evaporation Rate & Reference:**

**Solubility in Water:**  
COMPLETE

**Appearance and Odor:**  
DARK BLUE-GREEN FLUID, MILD ODOR

**Percent Volatiles by Volume:**  
50

**Corrosion Rate:**  
NP

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
NONE KNOWN.

**Materials To Avoid:**  
STRONG OXIDIZING AGENTS.

**Hazardous Decomposition Products:**  
FORMLDEHYDE.UPON COMBUSTION:OXIDES OF CARBON &NITROGEN.

**Hazardous Polymerization Indicator:**  
NO

**Conditions To Avoid Polymerization:**  
NOT APPLICABLE

## Toxicological Information

**Information:**N/P

## MSDS Transport Information

**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