

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-208/20816-12-0.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**

20816-12-0

**Code:**

M

**RTECS:**

RN1140000

**Code:**

M

**Name:**

OSMIUM TETOXIDE-OS

**Other REC Limits:**

0.0002 PPM

**OSHA PEL:**

0.002PPM/0.0006STEL

**Code:**

M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**

.0002PPM/.0006STEL93

**Code:**

M

**ACGIH STEL:**

N/P

**Code:**

## Control Measures

**Respiratory Protection:**

OSHA/MHSA APPROVED RESPIRATOR.

**Ventilation:**

LOCAL EXHAUST, MECHANICAL, HOOD

**Protective Gloves:**

RUBBER

**Eye Protection:**

SAFETY GOGGLES

**Other Protective Equipment:**

Equipment SAFETY SHOWER/EYEWASH STATIONS. PROTECTIVE CLOTHING.

**Work Hygienic Practices:**

WASH HANDS THOROUGHLY AFTER HANDLING.

**Supplemental Safety and Health:**

COLLECT IN GLASS, DISOLVE W/DILUTED POTASSIUM HYDROXIDE & FILTER W/GLASS FUNNEL. ADD SATURATED POTASSIUM HYDROXIDE SOLUTION TO FILTRATE. PRECIPITATE SOLUTION W/ETHANOL 100ML TO 1L SOLUTION. PRECIPITATION COMPLETED WHEN LIQUID IS WATER CLEAR (OSMIUM FREE). DISCARD. PACK POTASSIUM OSMIUM FROM FILTER IN AIR-TIGHT FLASK.

## Health Hazards Data

**LD50LC50Mixture:**

N/K

**Route Of Entry Inds - Inhalation:**

YES

**Skin:**

YES

**Ingestion:**

YES

**Carcinogenicity Inds - NTP:**

NO

**IARC:**

NO

**OSHA:**

NO

**Health Hazards Acute And Chronic:**

EYES: IRRITATION W/EFFECTS TO EYESIGHT. LACHRYMATING & PRODUCES HALO EFFECT AROUND BRIGHT LIGHTS. SKIN: STAINS BLACK, DERMATITIS, BURNS. INHALATION: HEADACHE, COUGH.

**Explanation Of Carcinogenicity:**

NONE

**Signs And Symptoms Of Overexposure:**

MAY CAUSE SERIOUS ILLNESS OR DEATH. MAY HAVE SEVERE EFFECTS ON FERTILITY. INHALATION: MAY DAMAGE LUNGS.

**Medical Cond Aggravated By Exposure:**

N/K

**First Aid:**

SKIN: WASH AFFECTED AREA W/COPIOUS AMOUNTS OF WATER. EYES: FLUSH W/WATER FOR AT LEAST 15 MINS. INHALATION: REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION, AS NEEDED. INGESTION: DRINK 1 OR 2 GLASSES OF WATER. OBTAIN MEDICAL ATTENTION IN ALL CASES.

**Spill Release Procedures:**

EVACUATE AREA. WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS & GLOVES. WASH AREA W/SODIUM BISULFITE TO CONVERT TO OSMIUM METAL. SWEEP UP & DISPOSE OF IN TOXIC WASTE DRUM.

**Neutralizing Agent:**

POTASSIUM HYDROXIDE. SEE SUPPLEMENTAL DATA.

**Waste Disposal Methods:**

RUN OFF MAY POLLUTE STREAMS, LAKES OR DRINKING WATER SUPPLIES. RESIDUES SHOULD BE CONTAINED IN POLYETHYLENE, POLYPROPYLENE OR OTHER INERT CONTAINERS & HELD FOR REFINING.

**Handling And Storage Precautions:**

STORE AT ROOM TEMPERATURE. KEEP STORAGE CONTAINER TIGHTLY CLOSED.

**Other Precautions:**

AVOID PROLONGED OR FREQUENT EXPOSURE.

## Fire and Explosion Hazard Information

**Flash Point Method:**

N/P

**Flash Point:**

**Flash Point Text:**

N/K

**Autoignition Temp:**

N/A

**Autoignition Temp Text:**

N/A

**Lower Limits:**

N/K

**Upper Limits:**

N/K

**Extinguishing Media:**

WATER, CO2, DRY CHEMICAL POWDER, FOAM

**Fire Fighting Procedures:**

FIREFIGHTERS MUST WEAR SELF-CONTAINED BREATHING APPARATUS & FULL PROTECTIVE EQUIPMENT.

**Unusual Fire/Explosion Hazard:**

OSMIUM FUMES PRODUCED BY FIRE ARE EXTREMELY TOXIC.

## Physical/Chemical Properties

**HCC:**

**NRC/State LC No:**

**Net Prop WT For Ammo:**

N/K

**Boiling Point:**

N/K

**B.P. Text:**

N/K

**Melt/Freeze Pt:**

N/K

**41C/F.P Text:**

N/K

**Decomp Temp:**

N/K

**Decomp Text:**

N/K

**Vapor Pres:**

N/K

**Vapor Density:**

N/K

**Volatile Org Content %:**

N/A

**Spec Gravity:**

4.906

**VOC Pounds/Gallon:**

N/A

**PH:**

N/K

**VOC Grams/Liter:**

N/A

**Viscosity:**

N/P

**Evaporation Rate & Reference:**

N/K

**Solubility in Water:**

COMPLETE

**Appearance and Odor:**

PALE YELLOW CRYSTALLINE MASS

**Percent Volatiles by Volume:**

N/K

**Corrosion Rate:**

N/K

**Handling And Storage Precautions:**

STORE AT ROOM TEMPERATURE. KEEP STORAGE CONTAINER TIGHTLY CLOSED.

**Other Precautions:**

AVOID PROLONGED OR FREQUENT EXPOSURE.

## Reactivity Data

**Stability Indicator:**

YES

**Stability To Avoid:**

N/K

**Materials To Avoid:**

ORGANIC VAPORS, POWERFUL OXIDIZING AGENTS.

**Hazardous Decomposition Products:**

TOXIC FUMES OF OSMIUM.

**Hazardous Polymerization Indicator:**

NO

**Conditions To Avoid Polymerization:**

N/K

**Information:**

N/P

## 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:**

N/P

**Information:**

N/P

**Information:**

N/P

**Information:**

N/P

**Information:**

N/P

**Information:**

N/P

**Information:**

N/P

**Information:**