

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Tungsten, Powder, 12 Micron, 99.9%
 Catalog Numbers:
 AC317840000, AC317841000
 Synonyms:
 Tungsten
 Company Identification (Europe): Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium
 Company Identification (USA): Acros Organics
 One Reagent Lane
 Fairlawn, NJ 07410
 For information in North America, call: 800-ACROS-01
 For information in Europe, call: 0032(0) 14575211
 For emergencies in the US, call CHEMTREC: 800-424-9300
 For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
7440-33-7	Tungsten	99.9	231-143-9

Hazard Symbols: None Listed.
 Risk Phrases: 10

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Flammable.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

Inhalation:

May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

Chronic:

Adverse reproductive effects have been reported in animals.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

Evacuate area and fight fire from a safe distance. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. May burn with invisible flame. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers

cool. Containers may explode in the heat of a fire. Flammable solid.
Spontaneously ignitable in air.

Extinguishing Media:

Use dry sand or earth to smother fire. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Use dry chemical to fight fire. Contact professional fire-fighters immediately.

****** SECTION 6 - ACCIDENTAL RELEASE MEASURES ******

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Isolate area and deny entry. Provide ventilation. Place under an inert atmosphere. Do not use combustible materials such as paper towels to clean up spill. A vapor suppressing foam may be used to reduce vapors.

****** SECTION 7 - HANDLING and STORAGE ********Handling:**

Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with skin and eyes. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Handle under an inert atmosphere. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not expose to air. Store under an inert atmosphere.

****** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ********Engineering Controls:**

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment**Eyes:**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR :1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

****** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ******

Physical State:	Solid
Appearance:	white to gray white
Odor:	none reported
pH:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	5900 deg C

Freezing/Melting Point: 3410 deg C
Autoignition Temperature: Not applicable.
Flash Point: Not applicable.
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature:
Solubility: Insoluble in water.
Specific Gravity/Density:
Molecular Formula: W
Molecular Weight: 183.85

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures. Powder or liquid is pyrophoric.
Conditions to Avoid:
Incompatible materials, ignition sources, dust generation, exposure to air, excess heat, strong oxidants, electrical sparks.
Incompatibilities with Other Materials:
Bromine trifluoride, chlorine trifluoride, fluorine, iodine.
Hazardous Decomposition Products:
Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.
Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 7440-33-7: YO7175000
LD50/LC50:
CAS# 7440-33-7: Draize test, rabbit, eye: 500 mg/24H Mild; Draize test, rabbit, skin: 500 mg/24H Mild.
Carcinogenicity:
Tungsten -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No information available.
Teratogenicity:
No information available.
Reproductive Effects:
No information available.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
May cause reproductive effects. See actual entry in RTECS for complete information.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Dispose of in a manner consistent with federal, state, and local regulations.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
No information available
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA
CAS# 7440-33-7 is listed on the TSCA inventory.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants

under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

Tungsten can be found on the following state right to know lists:
California, New Jersey, Florida, Pennsylvania, Minnesota,
Massachusetts.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

R 10 Flammable.

Safety Phrases:

S 9 Keep container in a well-ventilated place.

S 16 Keep away from sources of ignition - No
smoking.

S 28A After contact with skin, wash immediately with
plenty of water.

S 33 Take precautionary measures against static
discharges.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek
medical advice immediately (show the label where
possible).

WGK (Water Danger/Protection)

CAS# 7440-33-7: No information available.

United Kingdom Occupational Exposure Limits

CAS# 7440-33-7: OES-United Kingdom, TWA 1 mg/m3 TWA

CAS# 7440-33-7: OES-United Kingdom, STEL soluble: 3 mg/m3 STEL;

insoluble: 10 mg/m3 STEL

Canada

CAS# 7440-33-7 is listed on Canada's DSL List.

CAS# 7440-33-7 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 7440-33-7: OEL-DENMARK:TWA 5 mg/m3

OEL-RUSSIA:STEL 2 mg/m3

OEL-SWEDEN:TWA 5 mg/m3

OEL-UNITED KINGDOM:TWA 5 mg/m3;STEL 10 mg/m3 JAN9

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 5/05/1999 Revision #2 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.
