Material Safety Data Sheet Sodium tungstate dihydrate, p.a.

ACC# 96526

Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium tungstate dihydrate, p.a.

Catalog Numbers: AC207620000, AC207621000, AC207625000

Synonyms: Tungstic Acid Sodium Salt Dihydrates

Company Identification: Acros Organics N.V. One Reagent Lane Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01 For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

| CAS# | Chemical Name | Percent | EINECS/ELINCS |
|------------|----------------------------|---------|---------------|
| 10213-10-2 | Sodium Tungstate dihydrate | >98.0 | unlisted |

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white solid.

Caution! Causes eye and skin irritation. May cause respiratory tract irritation. The toxicological properties of this material have not

been fully investigated. Target Organs: None.

Potential Health Effects

Eye: Causes eye irritation. Skin: Causes skin irritation.

Ingestion: The toxicological properties of this substance have not been fully investigated. May be harmful if swallowed. Exposure has

caused anorexia, muscle incoordination, weight loss, and death in experimental

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

Chronic: No information found.

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 water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult,

give oxygen. Get medical aid.

Notes to Physician: The use of dimercaprol and calcium disodium edetate should be determin ed only by qualified medical personnel (Medical Toxicology, 1988).

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Combustion generates toxic fumes.

Extinguishing Media: For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

Flash Point: Not available.

Autoignition Temperature: Not available. Explosion Limits, Lower: Not available.

Upper: Not available. NFPA Rating: Not published.

Section 6 - Accidental Release Measures

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

Spills/Leaks: Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

| Chemical Name | ACGIH | NIOSH | OSHA - Final PELs |
|----------------------------|--|---|-------------------|
| Sodium Tungstate dihydrate | 5 mg/m3 TWA (listed under Tungsten).10 mg/m3 STEL (listed under Tungsten). | 5 mg/m3 TWA (listed under Tungsten).3 mg/m3 TWA (as W) (listed under Tungsten, soluble compounds). | none listed |
| Sodium tungstate | 1 mg/m3 TWA (as W) (listed under Tungsten, soluble compounds).3 mg/m3 STEL (as W) (listed under Tungsten, soluble compounds). | 3 mg/m3 TWA (as W) (listed under Tungsten, soluble compounds). | none listed |

OSHA Vacated PELs: Sodium Tungstate dihydrate: No OSHA Vacated PELs are listed for this chemical. Sodium tungstate: No OSHA Vacated PELs are listed for this chemical.

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: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid Appearance: white Odor: odorless pH: 8-9 (solution)

Vapor Pressure: Negligible.
Vapor Density: Not applicable.
Evaporation Rate:negligible
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point:1278 deg F
Decomposition Temperature:Not available.

Solubility: Soluble in water. Specific Gravity/Density:3.25 Molecular Formula:Na2O4W.2H2O Molecular Weight:329.854

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Conditions to Avoid: High temperatures, incompatible materials. Incompatibilities with Other Materials: Strong oxidizing agents. Hazardous Decomposition Products: No data available.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 10213-10-2: YO7900000 **CAS#** 13472-45-2: YO7875000

LD50/LC50: Not available.

CAS# 13472-45-2:

Oral, mouse: LD50 = 240 mg/kg; Oral, mouse: LD50 = 0.24 gm/kg; Oral, rabbit: LD50 = 875 mg/kg; Oral, rat: LD50 = 1190 mg/kg;

Carcinogenicity:

CAS# 10213-10-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 13472-45-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: Adverse reproductive effects have occurred in experimental animals.

Mutagenicity: Please refer to RTECS# YO7900000 for specific information.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. Water flea EC50=350mg/L/48 hours (as tungstate)

Environmental: This substance is expected to have no biological oxygen demand and is expected to cause no oxygen depletion in

aquatic systems. It has a low potential to affect aquatic oranisms.

Physical: No information available. **Other:** No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

Section 14 - Transport Information

| | US DOT | Canada TDG |
|----------------|---------------------------------------|---------------------------|
| Shipping Name: | Not regulated as a hazardous material | No information available. |
| Hazard Class: | | |
| UN Number: | | |
| Packing Group: | | |

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 10213-10-2 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

CAS# 13472-45-2 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

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

CAS# 10213-10-2 can be found on the following state right to know lists: California, (listed as Tungsten), New Jersey, (listed as Tungsten), Pennsylvania, (listed as Tungsten), Minnesota, (listed as Tungsten), Massachusetts, (listed as Tungsten).

CAS# 13472-45-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

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:

ΧN

Risk Phrases:

R 22 Harmful if swallowed.

R 36/38 Irritating to eyes and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 10213-10-2: No information available.

CAS# 13472-45-2: 1

Canada - DSL/NDSL

CAS# 13472-45-2 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 10213-10-2 (listed as Tungsten) is listed on the Canadian Ingredient Disclosure List.

CAS# 13472-45-2 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 6/09/1999 Revision #3 Date: 3/04/2004

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 event shall Fisher 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 Fisher has been advised of the possibility of such damages.