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                                                      888235001
    DATE:
    INDEX: D81494121
                                         CAT NO: AC197610010
                                                                           PO NBR: UNH-84010
                      **** MATERIAL SAFETY DATA SHEET ****
  Rhodium(ii) acetate, dimer, hydrate, ca43% rh
        **** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****
MSDS Name: Rhodium(ii) acetate, dimer, hydrate, ca43% rh
Catalog Numbers:
AC197610000, AC197610010, AC197612500
Synonyms:
Company Identification: Acros Organics N.V.
One Reagent Lane
Fairlawn, 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 ****
                                  Chemical Name
                                                                               EINECS#
       CAS#
      5503-41-3 Rhodium(II) acetate dimer, hydrate
                                                                                226-843-6
          Hazard Symbols: XI
          Risk Phrases: 36/38
                  **** SECTION 3 - HAZARDS IDENTIFICATION ****
                               EMERGENCY OVERVIEW
Appearance: green.
Caution! The toxicological properties of this material have not been fully investigated. May cause irritation.
Target Organs: None.
Potential Health Effects
     Eye:
          May cause eye irritation.
     Skin:
          May cause skin irritation.
     Ingestion:
The toxicological properties of this substance have not been fully investigated.
          May cause respiratory tract irritation.
     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 lids. Get medical aid.
          Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
     Ingestion:
           Get medical aid. Wash mouth out with water
           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:
           Treat symptomatically and supportively.
                   **** 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.
Extinguishing Media:
          In case of fire use water spray, dry chemical, carbon dioxide, or chemical foam.
      Autoignition Temperature: Not available
             Point: Not available.
      NFPA Rating: Not published.
Explosion Limits, Lower: Not available.
Upper: Not available.
                 **** 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
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**** SECTION 7 - HANDLING and STORAGE ****

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         Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Use only in a chemical fume hood.
         Store in a cool, dry place. Store in a tightly closed container
          **** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****
    Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
                                  Exposure Limits
                                                                       OSHA - Final PELs
    Chemical Name
  Rhodium(II) acetate metal: 1 mg/m3 dimer, hydrate TWA (listed under RHODIUM).
                                                      as Rh: 0.1 mg/m3 metal fume and
                                             TWA (listed
). under RHODIUM).as
Rh: 0.001 mg/m3
                                                                             insoluble
                                                                            compounds, as
Rh: 0.1 mg/m3
                                             TWA (listed
                                                                          TWA; soluble
                                             under RHODIUM
SOLUBLE
                                                                     compounds, a
s Rh: 0.001 mg/m3
TWA (listed un
                                                                         TWA (listeu ...
RHODIUM).
                                              COMPOUNDS).as
                                              Rh: 100 mg/m3
IDLH (Soluble
                                                                       der
                                              compounds as Rh:
                                             2 mg/m3 IDLH)
                                              (listed under
RHODIUM).
     OSHA Vacated PELs:
          Rhodium(I) acetate dimer, hydrate:
metal fume, as Rh: 0.1 mg/m3 TWA (listed under RHODIUMas Rh: 0.001
mg/m3 TWA (listed under RHODIUM SOLUBLE COMPOUNDS
     Personal Protective Equipment
                 Eyes:
Wear chemical goggles.
                        Wear appropriate protective gloves to prevent skin
                        exposure.
            Clothing: Wear a chemical apron.
          Respirators: A NIOSH/MSHA approved air purifying dust or mist
             **** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****
Physical State:
                                Not available.
Appearance:
Odor:
                                green
Not available.
pH:
Vapor Pressure:
                                 Not available
Vapor Density:
Evaporation Rate:
                                 Not available.
                                 Not available.
Viscosity:
Boiling Point:
                               Not available
Boiling Point: Not available.
Freezing/Melting Point: 0 deg C
Decomposition Temperature: Not available.
Solubility:
Solubility: ir
Specific Gravity/Density:
Molecular Formula:
                             insoluble
                                 Not available.
C8H12O8Rh2.xH2O
Molecular Weight:
                                  441.98
                  **** SECTION 10 - STABILITY AND REACTIVITY ****
      Chemical Stability:
     Stable under normal temperatures and pressures. Conditions to Avoid:
           Incompatible materials
      Incompatibilities with Other Materials:
      Strong oxidizing agents.
Hazardous Decomposition Products:
     Irritating and toxic fumes and gases.
Hazardous Polymerization: Has not been reported
                 **** SECTION 11 - TOXICOLOGICAL INFORMATION ****
      RTECS#:
     CAS# 5503-41-3: AJ3880000
LD50/LC50:
           Not available.
      Carcinogenicity:
       Rhodium(II) acetate dimer, hydrate
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ACGIH: A4 - Not Classifiable as a Human Carcinogen (listed as RHO
                   **** SECTION 12 - ECOLOGICAL INFORMATION ****
     Ecotoxicity:
          Not available.
     Environmental Fate:
          Not available.
     Physical/Chemical:
          Not available.
     Other:
           Not available.
                  **** SECTION 13 - DISPOSAL CONSIDERATIONS ****
Dispose of in a manner consistent with federal, state, and local regulations. RCRA D-Series Maximum Concentration of Contaminants:
RCRA D-Series Chronic Toxicity Reference Levels: None
listed.
RCRA F-Series: None listed
RCRA P-Series: None listed.
RCRA U-Series: None listed.
Not listed as a material banned from land disposal
according to RCRA.
                    **** SECTION 14 - TRANSPORT INFORMATION ****
     US DOT
           Shipping Name: CORROSIVE SOLID, N.O.S.*
Hazard Class: 8
               UN Number: 1759
           Packing Group: III
     IMO
           Shipping Name: CORROSIVE SOLID, N.O.S.
Hazard Class: 8
UN Number: 1759
           Packing Group: III
           Shipping Name: CORROSIVE SOLID, N.O.S.*
Hazard Class: 8
UN Number: 1759
           Packing Group: III
     RID/ADR
   Shipping Name: CORROSIVE SOLID, N.O.S. Dangerous Goods Code: 8(65C)
               UN Number: 1759
     Canadian TDG
           No information available.
                    **** SECTION 15 - REGULATORY INFORMATION ****
 US FEDERAL
         CAS# 5503-41-3 is not listed on the TSCA inventory. It is for research and development use only. 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.
         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
        Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
        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.
           None of the chemicals in this product are considered highly hazardous
           by OSHA.
      Rhodium(II) acetate dimer, hyd can be found on the following state right to know lists: California, (listed as RHODIUM), New Jersey, (listed as RHODIUM), Pennsylvania,
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(listed as RHODIUM), Minnesota, (listed as RHODIUM), Massachusetts, (listed as RHODIUM), California No Significant Risk Level:
None of the chemicals in this product are listed.

European/International Regulations
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XI
Risk Phrases:
R 36/38 Irritating to eyes and skin.

Safety Phrases:
S 15 Keep away from heat.
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.
S 28A After contact with skin, wash immediately with plenty of water.

WGK (Water Danger/Protection)
CAS# 5503-41-3:
Canada
None of the chemicals in this product are listed on the DSL/NDSL list.
WHMIS: Not available.
CAS# 5503-41-3 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits
CAS# 5503-41-3: OEL-AUSTRALIA:TWA 1 mg(Rh)/m3. OEL-BELGIUM:TWA 1 mg(Rh)/m3. OEL-DENMARK:TWA 0.01 mg(Rh)/m3. OEL-DENMARK:TWA 0.1 mg(Rh)/m3. OEL-THE NETHER LANDS:TWA 0.01 mg(Rh)/m3. OEL-THE NETHER LANDS:TWA 0.01 mg(Rh)/m3. OEL-THE NETHER LANDS:TWA 0.01 mg(Rh)/m3. OEL-THE NETHER LANDS:TWA 0.1 mg(Rh)/m3. OEL-SWITZERLAND:TWA 0.1 Mg(Rh)/m3. OEL-MINTED KINGDOM:TWA 0.1 mg(Rh)/m3. SEL 0.3 mg(Rh)/m3. OEL-INITED KINGDOM:TWA 0.1 mg(Rh)/m3. SEL 1.0 MBULGARIA, COLOMBIA, JORDAN, KOREA ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

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

MSDS Creation Date: 2/01/1996 Revision #2 Date: 9/02/1997

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