

## *Safety Data Sheet*

### *According to OSHA and ANSI*

Identification of the substance/mixture and of the company/undertaking Product identifier Product name: Palladium hydroxide , 0-20% on activated carbon powder, standard, reduced, nominally 50% water wet Details of the supplier of the safety data sheet Manufacturer/Supplier: Xi' an Catalyst New Materials Co.,Ltd No.6, Jingqin Road, New City of Jingwei, Xi'an, China, 710201 Offical Tel: +86 (029) 86932858 Offical Fax: +86 (029) 86932859 Email: <a href="mailto:catalyst@c-nin.com">catalyst@c-nin.com</a> Web: <a href="http://www.xakaili.com">www.xakaili.com</a> Informing department: Product safety department. Emergency telephone number: +86 (029) 86932829
<b>➤ Section 1 - Chemical Product</b>
MSDS Name: Palladium hydroxide on Activated Carbon (0-20% Pd) (wetted powder) Synonym: None
<b>➤ Section 2 - Composition, Information on Ingredients</b>
Substance/mixture: Mixture Component(s): Palladium hydroxide (0-20%) on Activated Carbon (wetted powder) Percent: .... CAS Number: 7440-05-3 Chemical Formula: Pd
<b>➤ Section 3 - Hazards Identification</b>
Classification of the GHS PHYSICAL HAZARDS: Not classified HEALTH HAZARDS: Not classified ENVIRONMENTAL HAZARDS: Not classified GHS label elements Pictograms or hazard symbols: None Signal word: No signal word Hazard statement: None Precautionary statements: None Other hazards which do not result in classification: Dust explosion possible if in powder or granular form, mixed with air.

#### ➤ 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: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

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

Never give anything by mouth to an unconscious person. Get medical aid.

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 if cough or other symptoms appear.

Notes to Physician:

#### ➤ Section 5 - Fire Fighting Measures

General Information: Wet catalyst does not burn.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam. Use agent most appropriate to extinguish fire.

#### ➤ 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. Avoid generating dusty conditions. Provide ventilation.

#### ➤ Section 7 - Handling and Storage

Handling: Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Keep away from sources of ignition.

Store in a tightly closed container.

#### ➤ Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Good general ventilation should be sufficient for most conditions. When processing at elevated temperature, provide local exhaust.

Personal protective equipment: for most conditions, no respiratory protection should be needed. When dry catalyst and elevated temperature, use an approved respiratory protection.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear a chemical apron. Wear appropriate clothing to prevent skin exposure.

Source of exposure limit data: None; None established.

#### ➤ Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: black

Odor: Odorless

pH: Not available.

Vapor Pressure: Negligible  
Viscosity: Not available.  
Boiling Point: Not available.  
Freezing/Melting Point: Not available.  
Auto-ignition Temperature: > 100 deg C (> 212.00 deg F)  
Flash Point: Not available.  
Explosion Limits, lower: N/A  
Explosion Limits, upper: N/A  
Decomposition Temperature: >100 deg C  
Solubility in water: insoluble  
Specific Gravity/Density: 12.02 g/cm<sup>3</sup>  
Molecular Formula: Pd  
Molecular Weight: 106.42

### ➤ Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.  
Conditions to Avoid: Exposure to air, combustible materials, temperatures above 100 deg C.  
Incompatibilities with Other Materials: Strong acids, halogens, oxidizing agents, alcohols, sulfur.  
Hazardous Decomposition Products: Palladium oxide, Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.  
Hazardous Polymerization: Will not occur.

### ➤ Section 11 - Toxicological Information

Acute Toxicity: No data available  
Skin corrosion/irritation: No data available  
Serious eye damage/irritation: No data available  
Germ cell mutagenicity: No data available  
Carcinogenicity:  
    IARC = No data available  
    NTP = No data available  
Reproductive toxicity: No data available  
RTECS Number: RT3480500

### ➤ Section 12 - Ecological Information

Ecotoxicity:  
    Fish: No data available  
    Crustacea: No data available  
    Algae: No data available  
Persistence / degradability: No data available  
Bioaccumulative potential(BCF): No data available  
Mobility in soil  
    log Pow: No data available

Soil adsorption (Koc): No data available  
Henry's Law constant(PaM<sup>3</sup>/mol): No data available

### ➤ Section 13 - Disposal Considerations

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system.

Observe all federal, state and local regulations when disposing of the substance.

### ➤ Section 14 - Transport Information

Hazards Class: Does not correspond to the classification standard of the United Nations  
UN-No: Not Listed

### ➤ Section 15 - Regulatory Information

Regulations on the Control over Safety of Dangerous Chemicals (State Council announces on January 26, 2002 and revised on February 16, 2011): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

CAS# 7440-05-3 is listed on Chinas DSL List.

CAS# is not listed on Chinas Ingredient Disclosure List.

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### ➤ Section 16 - Other information

The reference company name of written contents

Company: Xi'an Catalyst New Materials CO., LTD.

Address: No.6, Jingqin Road, New City of Jingwei, Xi'an Shaanxi 710201 China

Department: Technical Information Department

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This MSDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority.

The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

