

# Material Safety Data Sheet

# Aluminum Powder

## SECTION 1.Identification of the substance/preparation and of the company/undertaking

MSDS Number: GH --- Effective Date: 11/02/01

Application of the substance /the Preparation Pigment Manufacture/supplier: CHOICE CHEMICALS Co., Ltd

CENTRE OF CITY,NO.249 WUYI ROAD, Furong District, Hunan, China

Information in case of emergency: Tel: +86-731-89856736

**Product Identification** 

Aluminum- powder (Uncoated Aluminum

Powder) Molecular Formula: Al

CAS No.:7429-90-5 Molecular Weight:26.97

## SECTION 2. Composition/Information on Ingredientw

Chemical characterization

| Dangerous components: |                 |      |
|-----------------------|-----------------|------|
| CAS:7429-90-5         | Aluminum powder | ≥95% |

#### SECTION 3. Hazards Identification

Emergency Overview: Inhalation of dust linked to pulmonary fibrosis. Non-Hazardous under normal use. Potential Health Effects:

Eyes: May cause irritation. Skin: May cause irritation to skin.

Ingestion: May cause gastrointestinal discomfort. Inhalation: May cause irritation to respiratory tract.

## SECTION 4. First Aid Measures

Emergency and First Aid Procedures:

Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin - After contact with skin, wash immediately with plenty of ... (Water, unless specified as water-reactive).



Ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

## SECTION 5. Fire Fighting Measures

Special powder for metal fires, Do not use water Dry sand

For safety reasons unsuitable extinguishing agents: Water, Carbon dioxide

Protective equipment: Wear fully protective suit

#### SECTION 6. Accidental Release Measures

Isolation leakage polluted area, restrict access, cut off the source of fire. Recommended emergency personnel wearing positive pressure self-contained breathing apparatus, wear anti-static electric clothing.

Do not direct contact with the leaked material; a small leak: Avoid dust, with clean shovel collection in a dry,clean, covered containers. Transfer recovery. A large number of leaks: canvas covered with plastic sheeting, the use of non-sparking tools to transfer recovery.

## SECTION 7. Handling and Storage

#### Information for safe handling

Sealing operation, local exhaust ventilation, preferably wet operation; operator must pass special training and strictly abide by the rules and wear self-absorption filter respirators and chemical safety glasses and anti-static overalls, away from fire, heat; work spaces non-smoking, the use of explosion-proof ventilation systems and equipment to avoid from dust, avoid oxidants, acids, halides, with particular attention to avoid contact with water and nitrogen in the operation processing. Handling with care, packaging and containers to prevent damage, with a corresponding variety and quantity of fire equipment and emergency equipment leaks, and emptying out the residue

#### Storage:

Stored in a cool, dry, ventilated warehouse, away from fire, heat, package sealing; the same time with oxidants, acids, halides, etc. separately, avoid by all means to be mixed storage and explosion-proof lighting and ventilation facilities, prohibit the use of easy to produce sparks machinery and tools. Storage areas should be equipped with the appropriate disclosure of material objects asylum

## SECTION 8. Exposure Controls/Personal Protection

China MAC(mg/m3):Not standard

Former Soviet Union: MAC(mg/m3)2 [AI]



TLVTN:ACGIH 10mg/ m3 【dust】5mg/ m3 【 welding fumes】

TLVWN: Not standard Monitoring Method

Engineering control: Sealing operation, local exhaust ventilation, preferably by wet operation respiratory protection: Dust concentration in air is overweight, wearing self-absorption filter respirators, if necessary, wear breathing apparatus Eye protection:Safety glasses Body

protection: Protective work clothing

#### SECTION 9. Physical and Chemical Properties

Active Ingredient: Fine aluminum powder Appearance: silver powder

Melting Point (°C): 660
Boiling Point (°C) 2056
Relative density (water=1
Relative Vapor Density (Air=1)

Saturated Vapor Pressure(KPa):0.13(1284℃)

Heat of Combustion(KJ/mol):822.9

Critical Temperature(°C):N/A Critical Pressure(MPa):N/A

Octanol / Water partition coefficient values:

N/A Flash Point(°C):No information found

Ignition Temperature(°C):645

Upper Explosive Limit%(V/V): No information found

Lower Explosive Limit%(V/V):37~50 mg/m3

Solubility: insoluble in water, soluble in alkali, hydrochloric acid, sulfuric acid

Main Application: used as a pigment, paint, fireworks, etc., but also for the metallurgical

industry

# SECTION 10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Incompatibility: Reacts with acids, acyl chloride, strong oxidizers, halogens, oxygen Thermal Decomposition/Conditions to be avoided: moisture laden air

Hazardous Polymerization: Decomposition Product:

## SECTION 11. Toxicological Information

Acute Toxication :No LD50/LC50 information found relating to normal routes of occupational exposure.



# SECTION 12. Ecological Information

Ecotoxicological Toxicity: No information found. Ecological Degradation: No information found.

Accumulation of Ecological or Biological Enrichment : No information

found other Harmful Effects: No information found

13. Disposal Considerations

Waste Characteristics: Disposal Information: Disposal of the national and local laws, if possible,

and recycling can also be safe burial

# SECTION 14. Transport Information

ALUMINUM, POWDER UNCOATED

IMDG Class: 4.1 UN Number: UN1309 Packing Group: II Kind of Packing: O52

PACKING METHOD: Plastic bag or split leather paper carton outside the second floor openings or steel drums (steel thickness 0.5 mm, net weight not exceeding 50 kg per barrel); metal (cans), or plastic bucket outside the flower box grid; thread mouth bottle, plastic bottle or metal drums (cans) outside the ordinary wooden box, thread mouth bottle, plastic bottle or tin-plated sheet steel barrels (tanks) take-floor grille boxes, fibreboard or plywood box

Caution During Transportation: The transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leaks; shipment of the goods vehicle exhaust pipes shall be fire retardant devices, the transport process to ensure that the container does not leak, did not fall, do not fall, no damage. Strictly prohibited and oxidants, acids, halides, food chemicals mixed to prevent exposure, rain, high temperature. Should be away from fire, heat; trucks, boats must be dry, rain and good facilities, transport vehicles should be thoroughly cleaned finish, sliding rail placed to prohibit

#### SECTION 15. Regulatory information

Chemical Safety Management of Dangerous Goods Ordinance (February 17, 1987 the State Council), the chemical Dangerous Goods Safety Management Regulations implementing rules (Chemical 【1992】No.667), the provisions of the workplace safe use of chemicals (【1996】No. 423 issued by the Ministry of Labor), and other regulations for the safe use of hazardous chemicals, production, storage, transport, handling, etc. are doing the corresponding provisions of the classification of dangerous chemicals used and signs (GB13690-92) by section 4.3 of the substance - when wet flammable materials; Workplace air aluminum, alumina, aluminum dust in the standard (GB-11726-89), provides the air of workplace



maximum allowable concentration of the substance and inspection methods

## SECTION 16. Other Information

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