

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Commercial Name: NH3 ABSORBENT P/N 630-00705-01, 02

Material Name: Diatomaceous earth

General Use: For Gas Absorbent

Manufacturer's Name: SHINWA CHEMICAL INDUSTRIES, LTD.

Address: 50-2 Kagekatsu-cho, Fushimi-ku, Kyoto 612-8307 Japan

Emergency Phone: 81(75)621-2360

Emergency Fax: 81(75)602-2660

2. HAZARDS IDENTIFICATION

Phosphoric Acid

GHS Classification : Skin corrosion/irritation: Category 1A

Serious eye damage/eye irritation: Category 1

Acute toxicity-Oral: Category 4

Acute toxicity-Dermal: Category 5

Specific target organ systemic toxicity Single exposure: Category 3
<the respiratory tract irritation >

Hazard Symbol :



DANGER

Hazard Statements: Harmful if swallowed
Causes severe skin burns and eye damage
Causes serious eye damage
May be harmful in contact with skin
May cause respiratory irritation; or May cause drowsiness and dizziness
< the respiratory tract irritation >

Precautionary Statements : Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Get medical attention/advice if you feel unwell.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If on Skin: Gently wash with plenty of soap and water.
If Swallowed: Rinse mouth. Do NOT induce vomiting.
Store container tightly closed in well-ventilated place if product is as volatile as to generate hazardous atmosphere.
Dispose of contents/container to a located point (in accordance with local/regional/national/international regulation).

Diatomaceous earth

Hazard Symbol H: ---

Hazard Statements: ---

Additional Hazard Statements: May be harmful if inhaled and ingested.
May cause eye and skin irritation.

Precautionary Statements: ---

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Formula	CAS No.	Content
Phosphoric acid	H ₃ PO ₄	7664-38-2	20~25 %
Diatomaceous earth, Pellets	SiO ₂	68855-54-9	75~80 %

4. FIRST AID MEASURES

GENERAL ADVICE:

Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

INHALATION:

Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.

SKIN CONTACT:

Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.

EYE CONTACT:

Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.

INGESTION:

Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA:

Carbon dioxide, dry chemical powder, foam, water

FIRE & EXPLOSION HAZARDS:

Toxic and irritating dust, fumes or smoke may be emitted.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

Firemen should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Remove ignition sources and ventilate area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS:

Prevent spills from entering sewers, watercourses or low areas.

METHODS FOR CLEAN UP:

Do not touch spilled material without suitable protection (See section 8). After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove clean or dispose of contaminated clothing.

7. HANDLING AND STORAGE

HANDLING:

Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.

STORAGE:

Store away from sunlight in well-ventilated dry place at room temperature (Preferably cool place).

Keep container tightly closed.

INCOMPATIBLE PRODUCTS: Strong oxidizers, alkalis, metals

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING MEASURES:

Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

VENTILATION:

Local Exhaust; Necessary, Mechanical (General); Recommended

CONTROL PARAMETER:

OSHA Final Limits: TWA= 1 mg/m³ (H₃PO₄)

ACGIH TLV(s): TWA= 1 mg/m³; STEL= 3 mg/m³ (H₃PO₄)

PERSONAL PROTECTION:

Respiratory protection: NIOSH/MSHA approved respirator

Hand protection: Chemical resistant gloves

Eye protection: Safety glasses (goggles)

Skin protection: Protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Brown or Red, Pellets

ODOR: Odorless

pH: Not available

BOILING POINT: Not available

MELTING POINT: Not available

FLASH POINT: Nonflammable

FLAMMABILITY (solid, gas): Nonflammable

DECOMPOSITION TEMPERATURE: Not available

EXPLOSIVE LIMITS: Not available

VAPOR PRESSURE: Not available

SPECIFIC GRAVITY: Not available

SOLUBILITY IN:

WATER: Not soluble

ETHANOL: Not soluble

ACETONE: Not soluble

Phosphoric acid will be eluted when immersed in water, ethanol and acetone

10. STABILITY AND REACTIVITY

CONDITION TO AVOID: Sunlight, heat,

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizer, Strong alkalis, Moisture

HAZARDOUS DECOMPOSITION PRODUCTS: Not available

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA:

Oral/Rat/LD50: 1530mg/kg (H₃PO₄)

Skin/Rabbit/LD50: 2470mg/kg (H₃PO₄)

Skin/Rabbit: 595mg/24H, Severe (H₃PO₄)

Eye/Rabbit: 119mg, Severe (H₃PO₄)

Not available

Not available

Not available

STOST-SINGLE EXPOSURE: Human; mist, irritation of the upper respiratory tract (ACGIH 7th,2001)

ADDITIONAL INFORMATION:

NTP: Not listed

IARC: Not Classifiable as to Carcinogenicity to Humans (Group 3)

OSHA: Not listed

ACGIH: Not listed

12. ECOLOGICAL INFORMATION

BIODEGRADABILITY: Not available
BIOACCUMULATION POTENTIAL: Not available
AQUATIC TOXICITY: Not available
OTHER INFORMATION: Not available

13. DISPOSAL CONSIDERATIONS

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environmental agency for specific rules).

14. TRANSPORT INFORMATION

IATA: Not Restricted
DOT (Department of Transportation): Non Hazardous Material for DOT shipping.

15. REGULATORY INFORMATION

Phosphoric Acid

US REGULATIONS:

CWA/311 Haz., NIOSH Recommend. Subst., CERCLA Haz. Subst., SARA III/313 Tox. Chem., DOT Haz. Mat., DOT Haz. Sub. and Rep. Quant., Mass. Subst. List , New Jers. RTK Haz. Subst. List , Penn. Haz. Subst. List , Canad. WHMIS IDL 1% conc.

EPA: CERCLA RQ = 1000lb
EPCRA TPQ = SECTION 313 de minimis concentration is 1.0%.

OSHA: TQ= Not listed

EU REGULATIONS:

SYMBOL: C

R-phrases: R34

S-phrases: S26/45

Additional Hazard Statements : Harmful if inhaled and ingested.

React with most metals to form flammable hydrogen gas.

Diatomaceous earth

US REGULATIONS:

New Jers. RTK Haz. Subst. List, Penn. Haz. Subst. List,Canad. WHMIS IDL 1% conc.

EPA: CERCLA RQ = Not listed
EPCRA TPQ = Not listed

OSHA: TQ= Not listed

EU REGULATIONS:

SYMBOL: ---

R-phrases: ---

S-phrases: ---

16. OTHER INFORMATION

No specific notes

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and We shall not be held liable for any damage resulting from handling or from contact with the above material.