

MATERIALS SAFETY DATA SHEET

1.IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name: NABTAGARD

Synonyms: solution of Phosphorous acid and Potassium hydroxide

Manufacturer NABTA CO.LTD.

ADD. : RM 5-4-101 Jingchengxiufu No.58, FangZhuang NanLu, Beijing, CHINA

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2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS #	PERCENT
Phosphorous acid	13598-36-2	28
Potassium hydroxide	1310-58-3	25

3. HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE

Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns.

Eye: corrosive to the eyes and causes severe burns.

Skin: corrosive and causes severe burns and ulceration. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

Inhalation: Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Aspiration may lead to pulmonary edema. May cause systemic effects.

Chronic: Effects may be delayed. Repeated contact may cause corneal damage.

4.FIRST AID MEASURES

Eyes: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

5. FIRE-FIGHTING MEASURES

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Substance is noncombustible. Contact with metals may evolve flammable hydrogen gas.

Extinguishing Media: For small fires, use water spray, dry chemical, carbon dioxide or chemical foam. Do NOT get water inside containers. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

6. ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Cover with sand, dry lime or soda ash and place in a closed container for disposal. Provide ventilation.

7. HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Minimize dust generation and accumulation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Use only in a chemical fume hood. Discard contaminated shoes.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Skin Protection:

Skin contact should be prevented through use of suitable protective clothing, PVC rubber gloves and footwear, selected with regard for use conditions and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Eye Protection:

Eye/face protection requirements vary depending upon work environment conditions and material handling practices.

Appropriate ANSI Z87 approve equipment should be used for the particular use intended for this material. Use chemical safety glasses with side shields or splash proof goggles and face shield to prevent eye/face contact. Emergency eye wash must be readily accessible to work area.

Other Protection:

Product is easily removed with soap and water. Avoid prolonged or repeated breathing of dust and contact with skin. Remove contaminated clothing; launder before reuse. Cleanse skin thoroughly after contact, before meals and end of work period.

Ventilation Protection:

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: local exhaust ventilation at the point of generation.

9. PHYSICAL AND CHEMICAL PREPERTIES

Physical State: liquid

Odor and Appearance: odorless red liquid free of visible impurities

Odor Threshold (ppm): N/A

Miscibility with water: Any desired ratio

Infinitely soluble in water. Vapor Pressure (mm Hg): N/A

Vapor Density (Air=1): N/A

Evaporation Rate: N/D

pH 1% sol: 6.37

Specific Gravity: 1.32g/ml

Coefficient of Water/Oil distribution: N/D

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. **Hygroscopic:** absorbs moisture or water from the air.

Incompatibilities with Other Materials: Water, strong oxidizing agents, strong reducing agents, strong bases.

Hazardous Polymerization: Has not been reported.

11. TOXICOLOGICAL INFORMATION

Eye Effects:

No data found for product.

Skin Effects:

No data found for product.

Dermal Toxicity:

No data found for product.

Inhalation Effects:

No data found for product.

Sensitization:

No data found for product.

Ingestion Effects:

No data found for product

Carcinogenicity/Mutagenicity:

Not listed as a carcinogen by NTP, IARC or OSHA.

No information found on Mutagenicity.

Reproductive Effects:

No data found for product.

Neurotoxicity:

No data found for product.

Target Organs:

No data found for product.

Additional Toxicological Information:

No data found for product.

12. ECOLOGICAL INFORMATION

No experimental ecological data are available for product.

13. DISPOSAL CONSIDERATIONS

Product	According to local regulations.
Contaminated packaging	No specific recommendations.

14. TRANSPORT INFORMATION

Proper shipping name: NABTAGARD

Label requirement: None

Packing group: N/A

UN: None

CAS: N/A

15. REGULATORY INFORMATION

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.

16. OTHER INFORMATION

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.