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MATERIAL SAFETY DATA SHEET OF

NPK 20-20-20 +TE

1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product name: NPK 20-20-20 +TE

Trade name: Plantonus (Fertilizer NPK 20-20-20 +TE)

Formulation: White powder

Supplier: Shanghai Bosman Industrial Co., Ltd.

Street address: No. 1611, North Sichuan Road, Hongkou, Shanghai, R.P. China

FAX: +86 21 63065878

TEL:+86 21 63065878

Recommended use: Agricultural fertilizer

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical family: NPK compound fertilizer

Composition:

INGREDIENT	CAS NO	PROPORTION
N	mixture	20%
K_2O	mixture	20%
P_2O_5	mixture	20%
others (salts, trace elements, etc)	Not available	Up to 100%

Other ingredients determined not to be hazardous

3. HAZARDS INDENTIFICATION

Emergency overview: Harmful by inhalation. May cause sensitization by skin contact.

Health hazards:

May cause mild eye and skin irritation. Avoid contact with skin, eyes, open cuts, or sores. In cases of contact, flush with water. Get medical attention for eyes. This blended dry fertilizer is mixture of Ammonium Sulfate, Biosolids, and Monoammonium Phosphate. Nausea and vomiting could be expected upon large dose ingestion. The acute digestive effects are described as nausea, chills, and diarrhea. Eye or skin contact with these products could cause irritation (particularly in sensitive persons), and respiratory irritation could be expected from the unprotected inhalation of fertilizer dusts. Product users should avoid prolonged or repeated skin contact by wearing impervious gloves, long sleeve shirt, long pants, socks and rubber boots. Goggles for eye protection are recommended. Wash thoroughly after handling and using this

product.

4. FIRST AID MEASURES

General: Have the product container, label or Material Safety Data Sheet with you when going for treatment. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

Skin contact: Wash material off the skin in flowing water or shower with soap. If irritation persists, consult a physician immediately.

Eye contact: Immediately flush with copious amount of water for at least 15 minutes. If irritation persists, consult a physician.

Ingestion: Induce vomiting by giving one or two glasses of water. Get a medical attention immediately. If the victim is unconscious or having convulsions, never give fluids nor induce vomiting.

Inhalation: Remove the victim to fresh air and keep him warm and quiet. Get a medical attention immediately.

Note to physician: No specific antidote. Apply symptomatic therapy.

5. FIRE FIGHTING MEASURES

Flash point: Not available.

Extinguishing media: Water spray or fog, dry chemical powder, foam or carbon dioxide.

Special fire-fighting procedure:

Use water, dry chemical powder or carbon dioxide in extinguishing.

For a fire in surrounding area, apply water to cool and protect surrounding equipments. Remove containers, if feasible, from the fire area to safe place immediately.

Fire fighters should wear protective gears including a positive pressure self-contained breathing apparatus. Evacuate non essential personnel.

Hazardous combustion products: May include but are not limited to oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of phosphorus, oxides of sulfur, hydrogen sulfide, and cyanuric acid.

6. ACCIDENT RELEASE MEASURES

Avoid breathing dusts and vapors. Sweep up dry spills immediately and transfer to suitable containers for possible land application according to label use or for disposal. Check local, state and federal regulations for proper disposal.

Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

Handling precaution:

Avoid breathing fertilizer dust. Avoid prolonged or repeated skin contact. Avoid eye contact. Wash hands thoroughly after handling this product.

Storage precaution:

Store in original containers only. Keep containers tightly closed when not in use. Store in a cool, dry, well-ventilated area, preferably in a locked storage area away from children, feed and food products and seed. Store at ambient temperatures. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:

The use of local exhaust ventilation is recommended. Containers should be kept tightly closed.

Make available emergency showers and eye washes in a work area.

Personal protective equipment:

Wear chemical cartridge respirator with an organic vapour cartridge, airline respirator, positive pressure self-contained breathing apparatus, safety goggles, gloves and boots as appropriate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: white powder

Odour: NA

pH: NA

Specific gravity: NA

Flammability: No flammable

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

Hazardous decomposition products: May include but are not limited to oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of phosphorus, oxides of sulfur, hydrogen sulfide, and cyanuric acid.

Incompatible materials: Strong oxidizing agents.

Hazardous polymerization: Not known to occur.

11. TOXICOLOGICAL IMFORMATION

Acute toxicity:

Oral: LD_{50} (rat) >5000 mg/kg (male & female)

Dermal: LD_{50} (rat) >2000 mg/kg (male & female)

Irritant properties:

Eye irritation: (Rabbit): May cause irritant

Skin irritation: (Rabbit): May cause irritation in sensitive individuals.

Allergenic and Sensitizing Effects:

(Guinea pig) Not sensitizing

12. ECOLOGICAL IMFORMATION

Drift or runoff may adversely affect non-target plants. Do not apply directly to water. Do not contaminate water when disposing of equipment wash water. Do not apply when weather conditions favor drift from target area.

13. DISPOSAL CONSIDERATION

Dispose of in accordance with local regulation.

Do not dump into sewers or into any body of water.

Do not reuse container. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration or if allowed by State and local authorities, by burning. If burned, stay out of smoke. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION

According to IMDG/IMO, it is not a dangerous goods

15. REGULATORY INFORMATION

Follow all local and international laws and regulations.

16. OTHER INFORMATION

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact the company.

-- END OF MSDS --