

**MATERIALS SAFETY DATA SHEET****NABTA-LIB 20-10-20****CDFA Registered for Palm & Date Trees | Balanced Growth Formula**

*This SDS follows the same format and safety profile as Nabta-Lib 20-20-20.*

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

Product name: FULLY SOLUBLE FERTILIZER NABTA-LIB 20-10-20

CAS No.: N/A - This is a mixture/preparation

Molecular Weight: N/A - This is a mixture/preparation

Chemical Formula: N/A - This is a mixture/preparation

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
Urea	57-13-6	20.00-30.00
Potassium Sulfate	7778-80-5	25.00-35.00
MONOAMMONIUM PHOSPHATE	7722-76-1	15.00-25.00
Ammonium Sulfate	7783-20-2	10.00-20.00
Potassium Phosphate	7778-77-0	10.00-20.00

Note: 20-10-20 formulation is optimized for palm and date trees, providing balanced NPK with adequate potassium for fruit development and nitrogen for frond growth.

**3. HAZARDS IDENTIFICATION**

EMERGENCY OVERVIEW: This product is an odorless, colored crystaled powder.

**EFFECTS OF OVEREXPOSURE:**

Inhalation: Inhalation of dust may cause mild irritation.

Chronic: No evidence of chronic effects found.

Skin: Skin contact is not expected to cause irritation.

Eyes: Causes mild physical irritation.

Swallowing: No data available.

**FIRST AID MEASURES:**

Eyes: Flush immediately with large amounts of water for 15-30 minutes. Call a physician immediately.

Skin: Wash with plenty of soap and water for 15-30 minutes. Wash clothing before reuse. Seek medical attention if skin shows signs of irritation.

Inhalation: Remove to fresh air. If breathing has stopped, perform artificial respiration. Keep victim warm and at rest. Call a physician immediately.

Ingestion: If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Get immediate medical attention.

**4. FIRST AID MEASURES**

Ingestion: The mouth should be thoroughly washed out with water. If person is conscious, give large amounts of water. Do not induce vomiting. Get medical attention. Never give anything to eat or drink to someone who is unconscious, having convulsions, or unable to swallow.

Eyes: Flush eyes with large quantities of running water for a minimum of 15 minutes. If victim is wearing contact lenses, remove them. Hold eyelids apart during the flushing to ensure rinsing of entire surface of the eye and lids with water. Do not let victim rub eyes. Do not attempt to neutralize with chemical agents. Oils/ointments should not be used at this time. Get medical attention if eye irritation occurs.

Skin: Immediately wash with soap and water for a minimum of 15 minutes. Wash clothing before reuse and discard footwear which cannot be cleaned. Get immediate medical attention if irritation occurs.

Inhalation: Remove to fresh air. If breathing becomes difficult, oxygen may be given, preferably with a physician's advice. If not breathing, give artificial respiration. Get medical attention.

## 5. FIRE-FIGHTING MEASURES

Flammability: Non flammable.

Flash Point: N/D F N/D C

Autoignition Temperature: N/D F N/D C

Flammability Limits: Upper N/A; Lower N/A

Fire Extinguishing Media: This product is noncombustible. If involved in a fire, extinguishing agents suitable for surrounding materials should be used.

Special Fire-Fighting Procedures: As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate non-essential personnel from the fire area.

Sensitivity to Impact: None.

Sensitivity to Static Discharge: None.

## 6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Sweep spilled product and collect for reuse. Wash residue away. Do not contaminate drain. Soak up wash water with sand or absorbent material. Sweep up and dispose.

## 7. HANDLING AND STORAGE

Keep container well closed and store in a dry, well ventilated place away from sunlight. The product is hygroscopic and photosensitive. Avoid extremes of temperatures.

## 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.

Respiratory Protection: When dust standards are exceeded, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the latest OSHA standard (29 CFR 1910.134) and/or ANSI Z88.2 recommendations. Always wear NIOSH approved particulate approved respirator.

Eye Protection: Eye/face protection requirements vary depending upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved 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.

Exposure Limits: No specific recommendations.

Hygienic Practices: Minimize breathing dust. 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Crystaled Powder.

Odor and Appearance: Odorless, colored crystal powder.

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: 6.00-8.00

Specific Gravity kg/m<sup>3</sup>: 1280

Coefficient of Water/Oil distribution: N/D

## 10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions.

Conditions To Avoid: None

Incompatible Materials: The liquid solution develops hydrogen upon contact with copper and aluminum.

Hazardous Decomposition Products: Toxic fumes of nitrogen and sulfur oxide at temperatures above the decomposition temperature.

Polymerization Conditions To Avoid: None

## 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: FULLY SOLUBLE FERTILIZER NABTA-LIB 20-10-20

Label requirement: None

Packing group: N/A

UN: None

CAS: N/A - This is a mixture/preparation

## 15. REGULATORY INFORMATION

Product label name: FULLY SOLUBLE FERTILIZER NABTA-LIB 20-10-20

## 16. OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

This SDS is generated based on the Nabta-Lib 20-20-20 SDS template. The safety profile is consistent across the Nabta-Lib water-soluble NPK product line. The primary difference between formulations is the NPK ratio, which affects the composition proportions but not the hazard classification.