

Material Safety Data Sheet (NPK SUSPENSION 20-20-20)

1. Chemical product and company identification:

Common name: NPK Suspension Solution Fertilizer

Supplier & Manufacturer:

*Saf sulphur Factory for Agriculture and Industrial
New 2nd Industrial Area, P.O. Box 70482,
Riyadh 11567, Kingdom of Saudi Arabia,
Ph: +966(011) 2428722, Fax: +966(011) 2428733*

Material Uses:

Agricultural Industry: Fertilizer to supplement plant nutrient.

2. Composition/ information on ingredients:

CHEMICAL NAME	CAS NO.
Phosphoric Acid	7664-38-2
Urea	57-13-6
Potassium Sulphate	7778-80-5

3. Hazards Identification:

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not regulated by EU.
Additional hazard : No additional remark.
Effect & symptoms : Fertilizers are basically harmless product when handled correctly. However points in section 11 should be noted.

Aggravating condition : No additional remark.

4. First-aid measures:

First-aid measures

- Inhalation : If inhaled, remove to fresh air. Get medical attention if symptoms occur.
- Ingestion : Do not induce vomiting unless directed to do so by medical Personnel. Get medical attention if symptoms occur.
- Skin contact : In case of contact, immediately flush skin with plenty of water. Get medical attention if symptoms occur.
- Eye contact : Check for and remove any contact lenses. In case of contact, Immediately flush eyes with plenty of water for at least 15 Minutes. Get medical attention if symptoms occur.

Protection of first-aider : No additional remark.

5. Fire-fighting measures

Extinguishing Media

Suitable : Non-flammable substance. Use extinguishing media suitable For surrounding materials.

Not suitable : Do not use chemical extinguishers or foams or attempt to Smother the fire with steam of sand.

Special fire-fighting procedure : If fertilizer is directly involved in the fire use plenty of Water.

Hazardous thermal decomposition products:

These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂) when in contact with alkaline materials such as lime may give off ammonia gas.

Protection of Fire-fighters:

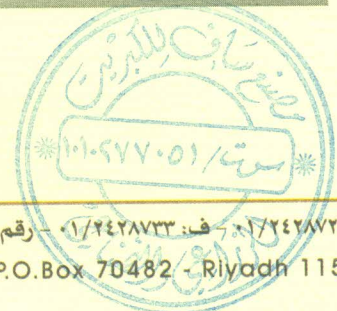
Full suit. Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode.

Unusual fire/explosion hazards:

Contact with combustible material may cause fire for an explosion.

6. Accidental release measures

Personal precautions : Do not touch spilled material.



Environmental precautions and clean -up method : Absorb with DRY earth, sand or other non-combustible material. Avoid contact with sawdust and other organic or combustible material (wood, paper, oil, clothing...). Avoid contamination of watercourses and drains.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and Storage

- Handling : Do not ingest. Avoid contact with skin and clothing. Wear suitable Protective clothing.
- Storage : Keep container in a cool, well-ventilated area. Keep away from Incompatibles.
- Packaging material recommended use:
: Use original container.

8. Exposure controls/ personal protection

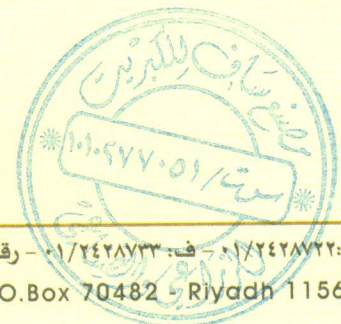
- Engineering measures : Provide exhaust ventilation or other engineering control to Keep the airborne concentrations of vapors below their Respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station Location.

Personal protective equipment

- Respiratory systems : No special protective clothing is required.
- Skin and body : Overalls.
- Hands : Gloves
- Eyes : Safety glasses

9. Physical and chemical properties

- Physical state : Liquid
- Color : Milky brown to grey suspension.
- Odor : Odourless
- Odor threshold : No data available
- Boiling point : Not applicable



Melting point	: No data available
Density	: 1.2 – 1.3 g/cm ³
Vapor density	: No data available
Vapor pressure	: No data available
Evaporation rate (butyl acetate=1)	: No data available
Solubility	: Fully soluble in water.
Octano/water partition Coefficient	: No data available
pH	: 5-6 Acidic
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Explosion limits	: Not applicable
Viscosity	: No data available.

10. Stability and reactivity

Stability : The product is stable under normal condition of storage, handling and Use.

Conditions to avoid: High temperatures and unnecessary exposure to the atmosphere.

Materials to avoid: High temperatures and unnecessary exposure to the atmosphere.

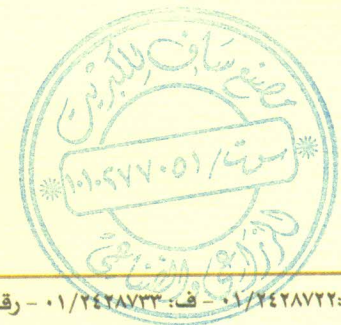
Hazardous decomposition product: These products are carbon oxides (CO, CO₂), nitrogen Oxides (NO, NO₂) when in contact with alkaline Materials such as lime may give off ammonia gas.

Hazardous polymerization: No data available.

11. Toxicological Information

Potential acute health effects

Eyes	: May cause irritation to eyes.
Skin	: May cause irritation to skin.
Inhalation	: May cause irritation to respiratory tract.
Ingestion	: No known effects.
Route of Entry	: Eye contact. Ingestion. Inhalation.
Special remark on toxicity:	No additional remark.



12. Ecological Information

Soil/water : No data available

13. Disposal considerations

Method of disposal : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

International transport regulations

15. Regulatory information

Product use : Classification and labeling have been performed according to EU directive 67/548/EEC, 1999/45/EC including amendments and the intended use.

16. Other information

R8- contact with combustible material may cause fire.

R9- explosive when mixed with combustible material.

R10- Flammable

R23- Toxic by inhalation.

R20- Harmful by inhalation.

R34- Causes burns.

R38- Irritating to skin.

R50- Very toxic to aquatic organism.

Notice to reader

This MSDS summarises at the date of issue our best knowledge of the health, safety and environmental hazard information related to the product, and in particular how to safely handle, use, store and transport the product. Since SASOL and its subsidiaries cannot anticipate or control the condition under which the product may be handled, used, stored or transported, each user must, prior to usage, review this MSDS in the context of how the user intend to handle, use, store or transport the product in the workplace and beyond, and communicate such information to all relevant parties. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. We shall not assume any liability for the accuracy or completeness of the information contained herein or any advice given unless there has been gross negligence on our part. In such event our liability shall be limited only to direct damages suffered. Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request. All risk associated with the possession and application of the product passes on delivery.

Authorized Signatory:

