



مصنع ساف للكبريت  
SAF Sulphur Factory

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**MATERIAL SAFETY DATA SHEET**  
**COMPOUND CHEMICAL FERTILIZER**  
*grade NPK 20:20:20*

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**MANUFACTURER:**

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**PRODUCT NAME:** SAF 20:20:20 NPK FERTILIZER

**CHEMICAL NAME:** Inorganic/Organic Chemical Fertilizer Mixture

**CHEMICAL FAMILY:** N-P-K Mixed dry blended fertilizer

**EPA REG. NO.:** not applicable

**MSDS Revisions:** 1 **Date of Issue:** 07-27-2013 Revised

**2. HAZARDS IDENTIFICATION SUMMARY**

**KEEP OUT OF REACH OF CHILDREN** – 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 Urea, Monoammonium Phosphate, Muriate of Potash, Gypsum, and Ammonium Sulfate. Nausea and vomiting could be expected upon large dose ingestion. The acute ingestive 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. This product is a multi-colored granule with dusty odor. Primary routes of entry are inhalation, eye contact and skin contact.

**3. COMPOSITION, INFORMATION ON INGREDIENTS (Note: see product tag or label for specific ingredients)**

**N-K-P (NITROGEN-PHOSPHORUS-POTASSIUM) MIXED DRY BLENDED FERTILIZERS** – No hazardous ingredient exceeds 1% of mixture

Chemical Ingredients:	Percentage by Weight:	CAS No.	TLV (Units)
Total Nitrogen (N)	20.00	Mixture	not listed
Available Phosphate (P2O5)	20.00	Mixture	not listed
Soluble Potash (K2O)	20.00	Mixture	not listed
Calcium (Ca)	1.62	Mixture	not listed
Magnesium (Mg)	0.01	Mixture	not listed
Sulfur (S)	6.72	Mixture	not listed
Fertilizer salts and inert ingredients	46.65		

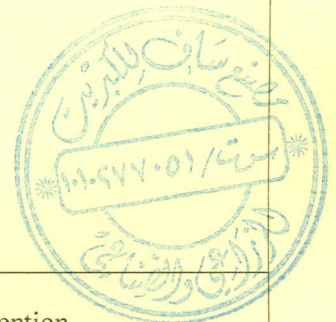
**4. FIRST AID MEASURES**

**If in Eyes:** Flush with clean running water for at least 15 minutes. If irritation persists, get medical attention.

**If on Skin:** Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, or if rash develops, get medical attention.

**If Swallowed:** If conscious, drink 1 or 2 glasses of water. Get medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

**If Inhaled:** Remove to fresh air. If irritation persists, get medical attention.



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#### 5. FIRE FIGHTING MEASURES

**FLASH POINT (F/Test Method):** Not applicable

**FLAMMABLE LIMITS (LFL & UFL):** Not applicable

**EXTINGUISHING MEDIA:** Considered non-combustible, use medium appropriate to surrounding fire. Dry chemical, CO<sub>2</sub>, foam, water spray or fog.

**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.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self contained breathing apparatus and full protective gear.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Sulfur-containing components may release oxides of sulfur.

#### 6. ACCIDENTAL RELEASE MEASURES

##### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

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.

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

#### 7. HANDLING AND STORAGE

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

**STORAGE** 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:** Not normally required.

**RESPIRATORY PROTECTION:** Not normally required. If vapors or dusts exceed acceptable levels, wear a NIOSH approved pesticide respirator.

**EYE PROTECTION:** Chemical goggles or shielded safety glasses.

**SKIN PROTECTION:** Wear protective clothing: long sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.

##### OSHA PEL 8 hr TWA ACGIH TLV-TWA

Nuisance Particulates 15 mg/m<sup>3</sup> (total dust) Not Established

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE AND ODOR:** Multi-colored granules with dusty odor **SOLUBILITY:** Appreciable

**SPECIFIC GRAVITY (Water = 1):** 0.9585 g/ml **BULK DENSITY:** 59.84 lbs/ft<sup>3</sup> **pH:** Not established

**VAPOR PRESSURE:** Not established **BOILING POINT:** Not established **SALT OUT:** Not applicable

**PERCENT VOLATILE (by volume):** Not established **EVAPORATION RATE:** Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample.

Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

#### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable **CONDITIONS TO AVOID:** Excessive heat and moisture.

**INCOMPATIBILITY:** Strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May include, but is 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.

**HAZARDOUS POLYMERIZATION:** Will not occur.

#### 11. TOXICOLOGICAL INFORMATION

**Acute Oral LD50 (rat):** >5000 mg/kg **Acute Dermal LD50 (rabbit):** >5000 mg/kg

**Eye Irritation (rabbit):** May cause irritation **Skin Irritation (rabbit):** May cause irritation in sensitive individuals

**Inhalation LC50 (rat):** May cause respiratory tract irritation **Skin Sensitization (guinea pig):** Not established



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**Carcinogenic Potential:** None listed in OSHA, NTP, IARC or ACGIH

#### 12. ECOLOGICAL INFORMATION

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 CONSIDERATIONS

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

**DOT Shipping Description:** NOT REGULATED BY USDOT

**U.S. Surface Freight Classification:** FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; DRY (NMFC 68140, SUB 5; CLASS 50)

**Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.**

#### 15. REGULATORY INFORMATION

**NFPA & HMIS Hazard Ratings:** NFPA HMIS

1 Health 0 Least 1 Health

1 Flammability 1 Slight 1 Flammability

0 Instability 2 Moderate 0 Reactivity

3 High G PPE

4 Severe

**SARA Hazard Notification/Reporting**

**SARA Title 111 Hazard Category:** Immediate Y Fire Y Sudden Release of Pressure N Delayed N Reactive N

**Reportable Quantity (RQ) under U.S. CERCLA:** Not listed

**SARA, Title 111, Section 313:** Not listed

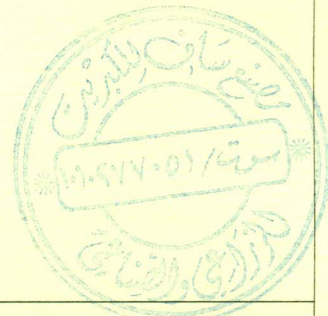
**RCRA Waste Code:** Not listed

**CA Proposition 65:** Not listed

#### 16. OTHER INFORMATION

**MSDS STATUS:** 1 Revision

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