

Material Safety Data Sheet

SECTION I. Chemical Product and Company Identification

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| PRODUCT NAME | Amcopaste 13-13-13 |
| TRADE NAME | Amcopaste 13-13-13 |
| CHEMICAL NAME | Not applicable; mixture of essential plant nutrients. |
| CHEMICAL FORMULA | Not applicable; Mix of inorganic materials |
| CHEMICAL FAMILY | Chemical fertilizer |
| SYNONYM | NPK Fertilizer |

MSDS prepared by the quality management of MCFP



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| MANUFACTURER Modern Company for Fertilizer Production Ltd. (MCFP) Street No. 10 Abdulla II ibn Al Hussein Industrial Estate Amman - Jordan Tel. +962 6 4023691 Fax. +962 6 4023607 | SUPPLIER Modern Company for Fertilizer Production Ltd. (MCFP) Street No. 10 Abdulla II bin Al Hussein Industrial Estate Amman - Jordan Tel. +962 6 4023691 Fax. +962 6 4023607 |
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SECTION II. Hazardous Ingredients

Exposure Limits (ACGIH)

| NAME | CAS # | TLV- TWA mg/m ³ ppm | STEL mg/m ³ ppm | CEIL mg/m ³ ppm | % by Weight |
|-------------------------|-------------------------|---|----------------------------------|----------------------------------|-------------------------|
| No regulated components | No regulated components | No regulated components | No regulated components | No regulated components | No regulated components |

TOXICOLGICAL DATA ON INGREDIENTS

Not applicable. This product is not considered hazardous and All ingredients are free of radiation based on the Jordanian Energy Authority Tests and laboratories of the Jordanian Agriculture Ministry.

SECTION III. Hazards Identification

POTENTIAL HEALTH EFFECTS
ACUTE

This product may irritate eyes and skin upon prolonged or repeated contact from mechanical action and the drying effect of mineral salts. Over-exposure by inhalation may cause respiratory tract irritation. Ingestion of this substance may produce irritation of the gastrointestinal tract, characterized by burning and diarrhea.

POTENTIAL HEALTH EFFECTS CHRONIC

There is no known effect from chronic exposure to this product.

EYE CONTACT

May cause eye irritation. Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Obtain medical attention if irritation persists.

MINOR SKIN CONTACT

May cause skin irritation due to the drying action of mineral salts. Wash contaminated skin with soap and water. Cover irritated skin with an emollient. If irritation persists, obtain medical attention. Wash contaminated clothing before reusing.

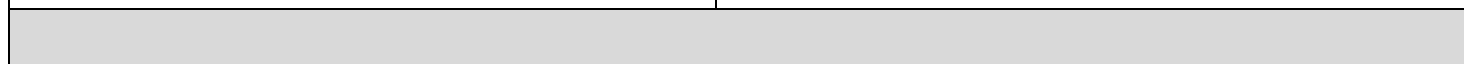
EXTENSIVE SKIN CONTACT

May cause light sensitivity

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| EXPLOSION HAZARD IN THE PRESENCE OF VARIOUS SUBSTANCES | This product is no-explosive |
| EXPLOSION HAZARD IN THE PRESENCE OF VARIOUS SUBSTANCES | This product is no-explosive |
| FIRE FIGHTING MEDIA AND INSTRUCTIONS | Material will not burn. Undergoes thermal decomposition at elevated temperatures to release toxic and combustible gases. Use extinguishing media suitable for surrounding materials. |
| SPECIAL REMARKS ON FIRE HAZARDS | Non combustible. Flammable/toxic gases will form at elevated temperatures (>190 °C) by thermal decomposition (ammonia, sulfur oxides, nitrogen oxides, phosphorous oxides). A self-contained breathing apparatus should be used to avoid inhalation of toxic fumes. |
| SPECIAL REMARKS ON EXPLOSION HAZARDS | No additional remarks. |

SECTION VI. Accidental Release Measures

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| SMALL SPILL | Use appropriate tools to put the spilled solid in a suitable container for intended use or disposal |
| LARGE SPILL | Prevent additional discharge of materials, if possible, to do so without hazard. Prevent spills from entering sewers, watercourses, wells, etc. Product will promote algae growth and may degrade water quality and taste. Notify downstream water users. Recover and place material in suitable containers for recycle, reuse, or disposal. Ensure disposal is in compliance with government requirements and local regulations |



SECTION VII. Handling and Storage

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| HANDLING | Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Keep container tightly closed. Do not get on skin or in eyes. Discard contaminated shoes |
| STORAGE | Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area. Store away from alkalis, Keep material out of the reach of children. |

SECTION VIII. Exposure Controls/Personal Protection

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| ENGINEERING CONTROLS | Uses process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If uses operations generate dust, use ventilation to keep exposure to airborne contaminants below the exposure limits. |
| PERSONAL PROTECTION | The selection of personal protection equipment varies, depending upon conditions of use. Where skin and eye contact may occur as a result of brief periodic exposures, wear long sleeve clothing, coveralls, leather gloves, and safety glasses. |
| PERSONAL PROTECTION IN CASE OF LARGE RELEASE | Work practice or other control measures are not adequate to prevent overexposure. Where skin and eye contact may occur as a result of prolonged or repeated exposures. |
| EXPOSURE LIMITS | Does not emit gases and dust in the appropriate Storage conditions. |

SECTION IX. Physical and Chemical Properties

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| PHYSICAL STATE AND APPEARANCE | Paste |
| MOLECULAR WEIGHT | Not available |
| COLOR | Red |
| pH (1/100) | 2.0-3.0 |
| E.C (1/1000) | 1.3 mS |
| SOLUBILITY IN WATER | 300 g/L Easily soluble in hot and cold water. |
| VOLATILITY | Not applicable |
| MELTING POINT | Not available |
| CRITICAL TEMPERATURE | Not available |
| SPECIFIC GRAVITY g/cc | 1.55 g / cm ³ |
| BULK DENSITY Lbs/ft ³ | 1550 |
| DISPERSION PROPERTIES | See solubility in water |
| VAPOR PRESSURE | Not applicable |
| VAPOR DENSITY | Not applicable |

SECTION X. Stability and Reactivity Data

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| STABILITY | The product is stable under suitable condition |
| INSTABILITY TEMPERATURE | More than 70C / less than 10C |
| INCOMPATIBILITY WITH VARIOUS SUBSTANCES | Slightly reactive to reactive with oxidizing agents. Very slightly to slightly reactive with metals, moisture. |
| CORROSIVITY | Highly corrosive in presence of aluminum, zinc, and copper. Slightly corrosive to steel, and 304 stainless steel. Non-corrosive to stainless steel. |
| SPECIAL REMARKS ON CORROSIVE ACIDS. | Avoid contact with moisture. Slow hydrolysis will produce corrosive acids. |
| SPECIAL REMARKS ON CORROSIVITY | Incompatible with copper alloys. Corrosive to brass. Corrosive to ferrous metals and alloys. |

SECTION XI. Toxicological Information

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| SIGNIFICANT ROUTS OF EXPOSURE | Ingestion. Inhalation |
| TOXICITY TO ANIMALS | Acute oral toxicity (LD 50):>3000 mg /1 Kg (Rat) |
| | Very low toxicity for humans or animals. Will release ammonium ions. Ammonia is a toxic hazard to fish. May be harmful to livestock and wildlife if ingested. Clean up |

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| SPECIAL REMARKS ON TOXICITY TO ANIMALS | all spilled material, especially where bulk fertilizer loading of equipment occurs. |
| OTHER EFFECTS ON HUMANS | Our data base contains no additional remark on the toxicity of this product. |
| SPECIAL REMARKS ON CHRONIC EFFECTS ON HUMANS | No additional remarks |
| SPECIAL REMARKS ON OTHER EFFECTS ON HUMANS | No additional remarks. |

SECTION XII. Ecological Information

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| ECOTOXICITY | Non-persistent. Non cumulative when applied using normal agricultural practices. Low toxicity for humans or animals under normal conditions of use. May be harmful to livestock and wildlife if ingested. Clean up all spilled material, especially where bulk fertilizer loading of equipment occurs to prevent animal exposure. |
| BOD and COD | Not available |
| PRODUCTS OF DEGRADATION | Nitrogen oxides (NO, NO ₂ ...), Sulfur oxides (SO ₂ , SO ₃ ,...) phosphates |
| TOXICITY OF THE PRODUCTS OF DEGRADATION | The products of biodegradation are not harmful under normal conditions of slow metabolic release. |
| SPECIAL REMARKS ON THE PRODUCTS OF DEGRADATION | May degrade water quality and taste. Notify downstream water users. Sulfates in potable drinking water should be maintained below 500 mg/L. Will dissolve and disperse in water. Reclaiming material may not be viable. |

SECTION XIII. Disposal Consideration

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| Waste Disposal or Recycling | Recycle to process, if possible. Ensure disposal is in compliance with government requirements and local regulations. Consult your local or regional authorities. |
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SECTION XIV. Transport Information

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| DOT/TDG CLASSIFICATION | Not controlled under TDG (Canada) or D.O.T. (U.S.A.) |
| PIN | Not applicable (PIN or PG) |
| SPECIAL PROVISIONS FOR TRANSPORT | Not applicable |
| UN-Number | None |
| UN proper shipping name | None |
| Transport hazard class(es) | None |
| Environmental hazards: | None |