

MATERIAL SAFETY DATA SHEET

MCPA Amine

MANUFACTURER: Winfield Solutions, LLC
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EMERGENCY TELEPHONE NO. - CALL CHEMTREC, DAY OR NIGHT, 1-800-424-9300

SECTION I - HAZARDOUS INGREDIENTS IDENTITY AND INFORMATION

HAZARDOUS COMPONENTS	OTHER OSHA LIMITS	CAS#	%
PEL			
EXPOSURE GUIDELINE - Dow Industrial Hygiene Guide			
2-Methyl-4-chlorophenoxyacetic acid, Dimethylamine salt	5 mg/m ³ (acid form)	2039-46-5	48.72%
Inert ingredients			51.28%

SECTION II -- PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: >100 °C
VAPOR PRESSURE (mm Hg): Low
VAPOR DENSITY: NA
SOLUBILITY IN WATER : Infinite
APPEARANCE AND ODOR: Dark brown to black liquid, slight amine odor.

SP. GR. (H₂O): 1.118 (20/20C)
MELTING POINT: NDA
EVAPORATION RATE: NDA

SECTION III -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT : Non-flammable
EXTINGUISHING MEDIA: For structures containing product use: Water fog, alcohol resistant foam, CO₂, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Wear positive pressure self-contained breathing apparatus .
UNUSUAL FIRE AND EXPLOSION HAZARDS: Noxious vapors under high temperature. Contain contaminated water from fire fighting to prevent entry into water supplies .

SECTION IV -- REACTIVITY DATA - STABILITY:

UNSTABLE CONDITIONS TO AVOID:

STABLE CONDITIONS TO AVOID: High temperatures

INCOMPATIBILITY (MATERIALS TO AVOID) : Base, oxidizing materials

HAZARDOUS DECOMPOSITION OR BY PRODUCTS: Noxious fumes under fire conditions, hydrogen chloride .

HAZARDOUS POLYMERIZATION:

MAY OCCUR CONDITIONS TO AVOID:

WILL NOT OCCUR CONDITIONS TO AVOID:

SECTION V -- HEALTH HAZARD DATA

HEALTH HAZARDS: EYE: May cause severe irritation with corneal injury and may result in permanent impairment of vision, even blindness. SKIN CONTACT: Prolonged exposure may cause skin irritation. SKIN ABSORPTION: A single prolonged skin exposure is not likely to result in the material being absorbed through skin in harmful amounts. The LD50 for skin absorption in rabbits is >2000 mg/kg. Repeated skin exposure may result in absorption of harmful amounts. INGESTION: Single dose oral toxicity is low. The LD50 for male rats is 1960 mg/kg and for females is 1700 mg/kg. Amounts ingested incidental to industrial handling are not likely to cause injury. INHALATION: Single exposure to vapors is not likely to be hazardous. SYSTEMIC AND OTHER EFFECTS: Repeated excessive exposures may cause liver, kidney, blood, CNS and testicular effects. Has caused birth defects in laboratory animals only at doses toxic to the mother. In animal studies, has been shown to interfere with fertility in males. Has been shown to be negative in some in vitro ("test tube") mutagenicity tests and positive in others. Results of mutagenicity tests in animals have been inconclusive .

EMERGENCY AND FIRST AID PROCEDURES: EYES: Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.
SKIN: Wash off in flowing water or shower. Wash contaminated clothing before reuse. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. INGESTION: Induce vomiting if large amounts are ingested. Consult medical personnel. INHALATION: Remove to fresh air if effects occur. Consult medical personnel. NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgement of the physician in response to reactions of the patient.

SECTION VI -- PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb spill in inert material such as sand or dirt . Dike area in case of large spill. Keep out of streams or domestic water supplies. For large spills, contact Dow Chemical at 517-636-4400.
WASTE DISPOSAL METHOD: Dispose of in an approved in accordance with all local, State, and Federal regulations
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

VENTILATION: Good general ventilation sufficient for most conditions. RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, Use an approved air-purifying respirator. SKIN PROTECTION: Use impervious gloves when prolonged or frequently

repeated contact could occur. EYE PROTECTION: Use chemical goggles. OTHER PRECAUTIONS: See label. Keep out of reach of children. Do not get in eyes, on skin, or on clothing. Do not swallow. Washing facilities near work area. Do not store near fertilizer, seed, fungicide or insecticides. Do not contaminate irrigation ditches or water used for domestic purposes.

SECTION VI I -- CONTROL MEASURES -- PROCESS AREAS

EXPOSURE GUIDELINE: Dow Industrial Hygiene Guide is 5 mg/m³ (acid form).
RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. VENTILATION: Local exhaust required. PROTECTIVE GLOVES: Use impervious gloves when prolonged contact occurs. EYE PROTECTION: Safety glasses or goggles OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Long sleeved shirt and/or coveralls. WORK/HYGIENIC PRACTICES: Wash hands after handling and before eating or smoking. Do not eat or smoke in work area.

SECTION VII -- REGULATORY COMPLIANCE

THE FOLLOWING INFORMATION MAY BE USEFUL IN COMPLYING WITH VARIOUS STATE AND FEDERAL ENVIRONMENTAL STATUTES :

REPORTABLE QUANTITY (RQ) , EPA REGULATION 40 CFR 302 (CERLA Section 102) :
CHEMICAL - NA CAS # RQ

THRESHOLD PLANNING QUANTITY (TPQ) , EPA REGULATION 40 CFR 355 (SARA Sections 301-304): CHEMICAL - NA CAS # TPQ

TOXIC CHEMICAL RELEASE REPORTING, EPA REGULATION 40 CFR 372 (SARA Section 313) :
CHEMICAL - NA CAS # % BY WEIGHT IN PRODUCT

HAZARDOUS CHEMICAL REPORTING, EPA REGULATION 40 CFR 370 (SARA Section, 311-312):
CHEMICAL -2-methyl-4-chlorophenoxyacetic acid CAS # 2039-46-5

EPA HAZARD CLASSIFICATION CODE:
ACUTE CHRONIC FIRE PRESSURE REACTIVE NOT
HAZARD HAZARD HAZARD HAZARD HAZARD APPLICABLE
XX XX

HAZARD RATING : NFPA
2 FIRE 2 TOXICITY 0 REACTIVITY 3 CORROSIVENESS (EYE)

HAZARD RATING CODE: 0-None 1-Slight 2-Moderate 3-High U-Unknown

SECTION IX -- TRANSPORTATION INFORMATION

For further information relative to spills resulting from transportation incidents, refer to latest Department of Transportation Emergency Response Guidebook for Hazardous Material Incidents. DOT P 5800.5.

DOT IDENTIFICATION: Not regulated RQ:
Freight description: Compound, weed killing, non-regulated. NA

OSHA REQUIRED LABEL INFORMATION: In compliance with hazard and right-to-know requirements, the following OSHA Hazard Warnings should be found on a label, bill of lading or invoice accompanying this shipment . NONE

NOTE: Product label will contain additional non-OSHA related information.

DATE: September 14, 2007 SUPERSEDES:

Revision:

The information herein was given in good faith but no warranty, expressed or implied was made. Consult Winfield Solutions, LLC for information .

NA = NOT APPLICABLE NDA = NO DATA AVAILABLE