



SAFETY DATA SHEET

Product: MARC 30 TRIPLE SELECT

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: **MARC 30 TRIPLE SELECT**

SDS DATE: 12/26/2018

SUPPLIER: Mid-American Research Chemical Corp. ADDRESS: P. O. Box 927 Columbus, NE 68602-0927
PHONE: 402-564-7104 FAX: 402-563-1290
EMERGENCY PHONE: InfoTrac 1-800-535-5053
E-MAIL: marc@marc1.com WEBSITE: www.marc1.com

RECOMMENDED USE: Selective Broadleaf Weed Killer.

PREPARED BY: MARC

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not exactly the same as on the FIFRA label. Certain sections are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15 - REGULATORY INFORMATION for explanation.

SECTION 2: HAZARDS IDENTIFICATION

PHYSICAL HAZARDS:

None known.

HEALTH HAZARDS:

Serious eye damage Category 1
Acute toxicity, oral Category 4
Skin Sensitization Category 1

ENVIRONMENTAL HAZARDS:

Hazardous to aquatic environment, acute Category 2
Hazardous to aquatic environment, chronic Category 2

SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

Causes serious eye damage. Harmful if swallowed. May cause an allergic skin reaction. Toxic to aquatic life with long-lasting effects.

PRECAUTIONARY STATEMENTS

Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Wear eye protection and protective gloves. Avoid breathing mist, vapors, or spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice. Wash contaminated clothing before reuse. Collect spillage. Dispose of contents in accordance with local, state, and federal regulations.



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Specific percentages may be claimed as a trade secret.

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% BY WEIGHT</u>
Dimethylamine Salt of 2, 4-Dichlorophenoxyacetic Acid	2008-39-1	29.6% - 31.5%
Dimethylamine Salt of Mecoprop-p Acid	66423-09-4	7.75% - 8.6%
Dimethylamine Salt of Dicamba (3,6-Dichloro-O-Anisic Acid)	2300-66-5	2.6% - 2.9%
Other ingredients	Trade Secret	Trade Secret

Synonyms: Herbicide Mixture of 2,4-D DMA, Mecoprop-p (MCP-p) DMA and Dicamba.

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.



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SECTION 4: FIRST AID MEASURES

EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice.

SKIN OR/ CLOTHING: Remove contaminated clothing. Rinse skin immediately with plenty of water for at 15-20 minutes. If irritation or rash occurs, get medical advice.

INGESTION: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. **DO NOT INDUCE VOMITING** unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: If inhaled remove person to fresh air. If breathing is difficult, administer oxygen. If symptoms develop, get medical advice.

MOST IMPORTANT SYMPTOMS/ EFFECTS, ACUTE & DELAYED: Causes severe eye irritation with possible eye damage. May be harmful if swallowed. May cause allergic skin reaction (sensitization).

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND TREATMENT NEEDED, IF NECESSARY: Get immediate medical attention for eye contact. For ingestion there is no specific antidote available. Treat symptomatically.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear NIOSH approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

UNUSUAL FIRE AND EXPLOSION HAZARDS: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

HAZARDOUS DECOMPOSITION MATERIALS/ (Under Fire Conditions): May produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

PROTECTIVE EQUIPMENT: Wear appropriate protective gear for the situation. Use personal protective devices as stated in Section 8.

ENVIRONMENTAL PRECAUTIONS: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Do not flush to drain. Large spill to soil or similar surfaces may necessitate removal of top soil. The affected area should be removed and placed in an appropriate container for disposal.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Same as EMERGENCY PROCEDURES. Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

OTHER INFORMATION: Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies. Dispose of in compliance with all federal, state and local laws and regulations.

SECTION 7: HANDLING AND STORAGE



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GENERAL HANDLING: Do not get in eyes, on skin or on clothing. Users should wash hands, face and arms with soap before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

OTHER PRECAUTIONS: **KEEP OUT OF REACH OF CHILDREN!! CAREFULLY READ ENTIRE LABEL BEFORE USE!**

STORAGE: Do not store near seed, fertilizer or other pesticides. Always use original container to store pesticides in a secured warehouse or storage building. Store at temperatures above 32°F. If allowed to freeze, remix before using. This does not alter the product. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not contaminate water, food or feed by storage or disposal.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS/ VENTILATION: Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

RESPIRATORY PROTECTION: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

EYE PROTECTION: To avoid contact with eyes, wear face shield, goggles or safety glasses. .

SKIN PROTECTION/PROTECTIVE GLOVES: Chemical resistant or rubber gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear long pants, long-sleeved shirt and shoes plus socks. Wear a chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposure to the concentrate. An emergency eyewash station, emergency shower or water supply should be readily accessible to the work area.

WORK HYGIENIC PRACTICES: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and /or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

COMPONENT	TWA	OSHA		ACGIH	
		STEL	TWA	STEL	UNIT
DMA Salt of 2,4-D	10*	NE	10* (inhalable, skin)	NE	mg/m3
DMA Salt of Mecoprop-p	NE	NE	NE	NE	
DMA Salt of Dicamba	NE	NE	NE	NE	
Other Ingredients	NE	NE	NE	NE	

*Based on adopted limit for 2,4-D-Dichlorophenoxyacetic acid

NE = Not Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE- PHYSICAL STATE: Liquid
COLOR: Dark brown
ODOR: Mild odor – slight phenolic
ODOR THRESHOLD: No data available
pH: 6.78 (1% dispersion in DIW)
MELTING POINT: Liquid at room temperature
BOILING POINT: No data available
FLASH POINT/METHOD USED: Not applicable due to aqueous solution
EVAPORATION RATE: No data available
FLAMMABILITY (solid, gas): No data available
FLAMMABILITY LIMITS/ UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS: No data available
VAPOR PRESSURE (mmHg): No data available
VAPOR DENSITY (AIR = 1): No data available
RELATIVE DENSITY: 1.127 g/cc @ 21°C



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SPECIFIC GRAVITY (H₂O = 1): 1.02
SOLUBILITY IN WATER: Soluble
**PARTITION COEFFICIENT/
N-OCTANOL/WATER:** No data available
AUTOIGNITION TEMPERATURE: No data available
DECOMPOSITION TEMPERATURE: No data available
VISCOSITY: 7.95 CPs @ 21°C
VOC EMISSION POTENTIAL (1%0): 2.09

NOTE: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: This product is not normally reactive.

CHEMICAL STABILITY: This material is stable under normal handling and storage conditions.

CONDITIONS TO AVOID: Excessive heat. Do not store near heat or flame.

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizing agents: bases and acids.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Under fire conditions, may produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION: N/A **CONDITIONS TO AVOID (POLYMERIZATION):** N/A

SECTION 11: TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE: Eye and skin contact.

SYMPTOMS OF EXPOSURE: Causes severe eye irritation and possible irreversible eye damage. Mildly irritating to the skin based on toxicity studies. Over exposure by skin absorption may cause symptoms similar to those for ingestion. Low inhalation toxicity based on toxicity studies. May be irritating to the respiratory tract. Overexposure by inhalation may cause symptoms similar to those from ingestion. Harmful if swallowed. May cause nausea, vomiting, abdominal pain, decreased blood pressure, muscle weakness, muscle spasms.

DELAYED, IMMEDIATE AND CHRONIC EFFECTS OF EXPOSURE: Repeated or prolonged skin exposure may cause allergic skin reaction (sensitization).

TOXICOLOGICAL DATA:

Data from laboratory studies conducted on this formulation:

Oral, Rat LD50: 1,697 mg/kg
Dermal, Rat or Rabbit LD50: >5000 mg/kg
Inhalation, Rat 4-hr LC50: > 2.14 mg/L (no mortalities at highest dose tested)
Eye Irritation, Rabbit: Corrosive
Skin Irritation, Rabbit: Slightly irritating.
Skin Sensitization, Guinea Pig: Not considered to be a contact sensitizer

SUBCHRONIC (TARGET ORGAN) EFFECTS: Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods. Repeated overexposure to dicamba may cause liver changes or a decrease in body weight.

CARCINOGENICITY / CHRONIC HEALTH EFFECTS: The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. However, more current 2,4-D lifetime feeding studies in rats and mice, as well as an MCPP lifetime feeding study in rats, did not show carcinogenic potential. Dicamba did not cause cancer in long-term animals studies. The U.S. EPA has given 2,4-D and dicamba a Class D classification (not classifiable as to human carcinogenicity).

REPRODUCTIVE TOXICITY: No impairment of reproductive function attributable to 2,4-D has been noted in laboratory animal studies. Animal tests with dicamba have not demonstrated reproductive effects.

DEVELOPMENTAL TOXICITY: Studies in laboratory animals with 2,4-D and MCPP have shown decreased fetal body weights and delayed development in the offspring at doses toxic to mother animals. Animal tests with



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dicamba have not demonstrated developmental effects.

GENOTOXICITY: There have been some positive and some negative studies, but the weight of evidence is that neither 2,4-D nor MCPP is mutagenic. Animal tests with diacamba have not demonstrated mutagenic effects.

ASSESSMENT CARCINOGENICITY:

This product contains substances that are considered to be probable o suspected human carcinogens as follows:

COMPONENT	REGULATORY AGENCY LISTING AS CARCINOGEN			
	ACGIH	IARC	NTP	OSHA
Chlorophenoxy Herbicides (2,4-D, MCPP)	No	2B	No	No
DMA Salt of Dicamba	No	No	No	No
Other Ingredients	No	No	No	No

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide may be toxic to fish and aquatic invertebrates and may adversely affect non-target plants.

ECOTOXICITY:

Data on 2,4-D Dimethylamine Salt:

96-hour LC50 Bluegill:	524 mg/l	Bobwhite Quail Oral LD50:	500 mg/kg
96-hour LC50 Rainbow Trout:	250 mg/l	Mallard Duck 8-day Dietary LC50:	>5,620 ppm
48-hour EC50 Daphnia:	184 mg/l		

Data on Mecoprop-p Dimethylamine Salt:

96-hour LC50 Bluegill:	112 mg/l	Bobwhite Quail Oral LD50:	>5,600 ppm
96-hour LC50 Rainbow Trout:	111 mg/l	Mallard Duck 8-day Dietary LC50:	625 ppm
48-hour EC50 Daphnia:	256 mg/l	72-hour EC50 Green Algae:	100 mg/l

Data on Dicamba Acid:

96-hour LC50 Bluegill:	135 mg/l	Bobwhite Quail Oral LD50:	>10,000 ppm
96-hour LC50 Rainbow Trout:	135 mg/l	Mallard Duck 8-day Dietary LC50:	>10,000 ppm
48-hour EC50 Daphnia:	110 mg/l		

ENVIRONMENTAL FATE:

In laboratory and field studies, 2,4-D DMA salt rapidly dissociated to parent acid in the environment. The typical half-life of the resultant 2,4-D acid ranged from a few days to a few weeks. Mecoprop-p DMA rapidly dissociates to parent mecoprop-p in the environment. In soil, mecoprop-p is microbially degraded with a typical half-life of approximately 11 to 15 days. Dicamba has low bioaccumulation potential, is not persistent in soil, is highly mobile in soil and degrades rapidly.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Pesticide wastes are toxic. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed, labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING AND DISPOSAL:

Nonrefillable Containers 5 Gallons or less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (for ground/non-bulk containers)

CONTAINER SIZES(S): 2.5 Gallon Jugs



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PROPER SHIPPING NAME: WEED KILLING COMPOUND, DRY/LIQUID.
HAZARD CLASS: None
ID NUMBER: None
PACKING GROUP: None
LABEL STATEMENT: None

SECTION 15: REGULATORY INFORMATION

EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

DANGER: Corrosive, causes irreversible eye damage. Do not get in eyes, or on skin or clothing. Harmful if swallowed.

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Acute Health

SARA 313 Toxic Chemical(s):

Dimethylamine Dicamba (CAS No. 2300-66-5), 2.6 – 2.9% by weight in product.

REPORTABLE QUANTITY (RQ) UNDER U.S. CERCLA:

Dimethylamine Dicamba (CAS No. 2300-66-5) None given.

RCRA WASTE CODE:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

STATE INFORMATION:

Other state regulations may apply. Check individual state requirements.

CALIFORNIA PROPOSITOIN 65: Not listed.

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 3
Flammability = 1
Reactivity = 0
Other = -
Protection = -

REVISION DATE: 12/26/2018

DISCLAIMER: While the information contained herein is believed to be correct, no warranties are made with respect thereto, and all liability from reliance thereon is disclaimed.