



SAFETY DATA SHEET

Product: **MARC 252 TUFF STUFF**

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: **MARC 252 TUFF STUFF**

SDS DATE: 01/11/2019

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: Cleaner and Descaler.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Causes severe skin burns and eye damage category 1B. May be corrosive to metals category 1.

SIGNAL WORD AND HAZARD AND PRECAUTIONARY STATEMENTS-- DANGER: Causes Burns. May be corrosive to metals.

Causes severe skin burns and eye damage. **Precautionary statements--Prevention**-Keep only in original container. Do not breathe mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response-Absorb spillage to prevent material damage. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Specific treatment: See supplemental first aid information. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **Storage/Disposal**-Store in corrosive resistant/ container with a resistant inner liner. - P406 Store locked up. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT.</u>	<u>TLV</u>
Phosphoric Acid	7664-38-2	20 - 30	1 mg/m3
Nonylphenol Ethoxylate	127087-87-0	0.5 - 2	None

Specific percentages may be claimed as a trade secret.

SECTION 4: FIRST AID MEASURES

EYE: Immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. Remove contact lenses, if present and easy to do. Seek immediate medical attention, preferably with an ophthalmologist. If the physician is not immediately available, eye irrigation should be continued for an additional 15 minutes. If it is necessary to transport the patient to a physician and the eye needs to be bandaged, use a dry sterile cloth pad and cover both eyes.

SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower. For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Wash skin with soap and water. Seek immediate medical attention. Wash contaminated clothing before reusing and discard contaminated shoes.

INGESTION: Rinse mouth. **DO NOT INDUCE VOMITING!** Give 2-3 glasses of water if victim is conscious and alert. Do not give anything by mouth to an unconscious person. Obtain medical attention immediately if ingested. Do not use mouth-to-mouth method if victim ingested the substance. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Persons attending the victim should avoid direct contact with heavily contaminated clothing and vomitus. Wear impervious gloves while decontaminating skin and hair.

INHALATION: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Give artificial respiration if victim is not breathing.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.



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OTHER INFORMATION: Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Not combustible. Use extinguishing media suitable for surrounding fire.

UNSUITABLE EXTINGUISHING MEDIA: None known.

SPECIAL FIRE FIGHTING PROCEDURES/ EQUIPMENT:

Wear positive pressure self-contained breathing apparatus(SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Keep unauthorized personnel away. Evacuate residents who are downwind of fire.

Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Not combustible. Under fire conditions, toxic, corrosive fumes are emitted.

HAZARDOUS DECOMPOSITION PRODUCTS: Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Oxides of phosphorus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: Ventilate enclosed areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. (See Section 8.) Keep unauthorized personnel away. Dike spill using absorbent or impervious materials such as earth, sand or clay. Dike or retain dilution water or water from firefighting for later disposal.

ENVIRONMENTAL PRECAUTIONS: Prevent entry into waterways, sewers, basements or confined areas. Runoff from fire control or dilution water may cause pollution.

PROTECTIVE EQUIPMENT: Use personal protective devices as stated in Section 8.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Same as EMERGENCY PROCEDURES. Exercise caution during neutralization as considerable heat may be generated. Neutralize spill area with soda ash, sodium bicarbonate or lime. Flush neutralized spill with copious amounts of water.

REFERENCE TO OTHER SECTIONS: Refer to Section 8 – Exposure Controls/Personal Protection and Section 13 – Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

GENERAL HANDLING Do not get on skin or in eyes. Avoid breathing vapors and mists. Do not ingest. This product reacts violently with bases liberating heat and causing spattering.

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

STORAGE: Store in a dry, well-ventilated place. Store locked up. Keep away from incompatible materials. Ventilate enclosed areas.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS VENTILATION:

Good general ventilation should be used. Ventilation rates should be matched to conditions.



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- RESPIRATORY PROTECTION:** Follow the OSHA respirator regulations found in 29 CFR 1910.134.
- EYE/FACE PROTECTION:** Wear face shield and eye protection.
- SKIN PROTECTION/PROTECTIVE GLOVES:** Wear protective gloves selected with regard to both durability as well as permeation resistance.
- OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Wear protective clothing. Eye wash station must be readily accessible to the work area.
- WORK HYGIENIC PRACTICES:** Do not get in eyes or on skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Handle in accordance with good industrial hygiene.
- ENVIRONMENTAL EXPOSURE CONTROLS:** Follow best practice for site management and disposal of waste.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE-	
PHYSICAL STATE:	Liquid
COLOR:	Blue
ODOR:	Cherry
ODOR THRESHOLD:	Data lacking.
pH:	<1
PERCENT VOLATILE:	N/D
MELTING POINT:	N/A
FREEZING POINT:	N/A
BOILING POINT:	212°F
FLASH POINT/METHOD USED:	Not relevant
EVAPORATION RATE:	Data lacking
FLAMMABILITY (solid, gas):	Not relevant
FLAMMABILITY LIMITS:	LEL: Not relevant. UEL: Not relevant
VAPOR PRESSURE (mmHg):	<2 mmHg (torr) @ 20°C (68°F)
VAPOR DENSITY (AIR = 1):	Data lacking
SPECIFIC GRAVITY (H₂O = 1):	1.15 at 25°C (77°F)
SOLUBILITY IN WATER:	Complete
OXIDIZING PROPERTIES:	Not relevant.
EXPLOSIVE PROPERTIES:	Not relevant.
DECOMPOSITION TEMPERATURE:	Data lacking.
AUTOIGNITION:	Not relevant.
OCTANOL/WATER	
PARTITION COEFFICIENT:	Data lacking
VISCOSITY:	Data lacking

SECTION 10: STABILITY AND REACTIVITY

- REACTIVITY:** No dangerous reaction known under conditions of normal use.
- STABILITY:** Stable.
- CONDITIONS TO AVOID:** Incompatible materials.
- INCOMPATIBILITY (MATERIAL TO AVOID):** Strong oxidizing agents, strong reducing agents, bases and certain metals.
- HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Oxides of phosphorus.
- HAZARDOUS POLYMERIZATION:** Will not occur. **CONDITIONS TO AVOID (POLYMERIZATION):** N/A

SECTION 11: TOXICOLOGICAL INFORMATION

- INFORMATION ON TOXICOLOGICAL EFFECTS:** This material is an acid. The primary effects and toxicity of this material are due to its corrosive nature.

	CAS	
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PHOS ACID 75% TECHNICAL	7664-38-2	ACUTE TOXICITY: Ingestion/Oral-Rat LD50 * 1530 mg/kg * Comments: Data for phosphoric acid; Skin-Rabbit LD50 * 2740 mg/kg; IRRITATION: Eye-Rabbit * 119 mg/kg * Severe irritation, irreversible, burns (corrosive) * Comments: Data for phosphoric acid; Skin-Rabbit * 595 mg/kg 24 Hour(s) * Severe irritation, irreversible, burns (corrosive)
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ROUTES OF ENTRY: Inhalation, Skin, Eye, Ingestion

POTENTIAL HEALTH EFFECTS:

INHALATION:

ACUTE: (Immediate): Under normal conditions of use, no health effects are expected.

CHRONIC (DELAYED): Repeated or prolonged exposure to corrosive fumes may cause bronchial irritation with chronic cough.

SKIN:

ACUTE: (Immediate): Causes severe skin burns and eye damage.

CHRONIC (Delayed): Repeated or prolonged exposure to corrosive materials will cause dermatitis.

EYES:

ACUTE: (Immediate): Corrosive. Can cause permanent damage to the cornea, blindness.

CHRONIC (Delayed): Repeated or prolonged exposure to corrosive materials or fumes may cause conjunctivitis.

INGESTION:

ACUTE: (Immediate): Causes corrosion, burns to mouth and esophagus, abdominal pain, chest pain, nausea, vomiting, diarrhea, seizures. Aspiration of the swallowed or vomited product can cause severe pulmonary complications.

CHRONIC (Delayed): Repeated or prolonged exposure to corrosive materials or fumes may cause gastrointestinal disturbances.

CARCINOGENIC EFFECTS: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY:

PHOS ACID 75% TECHNICAL			7664-38-2		
DOSAGE	SPECIES	DURATION	RESULTS	EXPOSURE CONDITIONS	COMMENTS
138 mg/L	Fish: Mosquitofish	96 Hour(s)	LC50	NDA	NDA

PERSISTENCE AND DEGRADABILITY: No data found for product.

BIOACCUMULATIVE POTENTIAL: No data found for product.

MOBILITY IN SOIL: No data found for product.

RESULTS OF PBT AND vPvB ASSESSMENT: PBT and vPvB assessment has not been carried out.

OTHER ADVERSE EFFECTS:

ECOLOGICAL FATE: No data found for product.

OTHER INFORMATION:

No specific biodegradation test data located. While acidity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with all local, regional and national regulations. This material is considered an EPA hazardous waste. EPA "RCRA" Hazardous Waste Code: "C" Corrosive.

SECTION 14: TRANSPORT INFORMATION

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



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CONTAINER SIZES(S): Quarts
PROPER SHIPPING NAME: Compound, Cleaning Liquid.
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENT: Limited Quantity

CONTAINER SIZES(S): Pails and Drums
PROPER SHIPPING NAME: Compounds, Cleaning Liquid (Contains Phosphoric Acid)
HAZARD CLASS: 8
ID NUMBER: NA1760
PACKING GROUP: PG III
LABEL STATEMENT: Corrosive

SECTION 15: REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA HAZARD CLASSIFICATIONS: Acute

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): TSCA REGULATORY: N/A

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): N/A

311/312 HAZARD CATEGORIES: Immediate (Acute) Health Hazard

313 REPORTABLE INGREDIENTS: N/A

SECTION 16: OTHER INFORMATION

HMIS/NFPA Ratings: Health = 2
Flammability = 0
Reactivity = 0
Other = -
Protection = -

REVISION DATE: 01/11/2019

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.