



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: 4/25/14

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: Will cause eye burns and permanent tissue damage. Severe irritant to skin. Burning and redness caused by contact with liquid.

SIGNAL WORD AND PRECAUTIONARY STATEMENTS: **CORROSIVE:** Contains phosphoric acid. Do not mix with chlorine bleach or other cleaning products. Concentrated product may harm porcelain.

POTENTIAL HEALTH EFFECTS: See Section 11 for more information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Phosphoric Acid	7664-38-2	1mg/m3	1 mg/m3
Nonylphenol Ethoxylate	9016-45-9	Not Established	Not Established
Water	7732-18-5		

SECTION 4: FIRST AID MEASURES

EYE: Immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing. Seek immediate medical attention.

SKIN: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated shoes and clothing. Seek immediate medical attention. Wash contaminated clothing before reusing and discard contaminated shoes.

INGESTION: Seek immediate medical attention. **DO NOT INDUCE VOMITING!** Vomiting will cause further damage to the mouth and throat. If individual is conscious and alert, immediately rinse mouth with water and give milk or water to drink. If possible, do not leave individual unattended.

INHALATION: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention. Keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

MEDICAL CONDITIONS AGGRAVATED: Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material; skin, lung (for example, asthma-like conditions).

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: See Medical Conditions above.



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SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

SPECIAL FIRE FIGHTING PROCEDURES: Water may be used to extinguish fire by cooling, and diluting liquid with water. Wear a self-contained breathing apparatus with full face piece operated in the positive pressure demand mode. (SEE SECTION 8).

UNUSUAL FIRE AND EXPLOSION HAZARDS: Addition to water releases heat which can result in violent boiling and spattering. Always add slowly and in small amounts. Never use hot water. Never add water to acids. Always add acids to water.

HAZARDOUS DECOMPOSITION PRODUCTS: May form phosphorous compounds.

SECTION 6: ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: **Small Spill & Leak:** Cover the contaminated surface with sodium bicarbonate or a soda ash/flaked lime mixture (50-50). Mix and add water if necessary to form a slurry. Scoop up slurry and wash site with soda ash solution. Proper mixing procedures are essential. Trained personnel should conduct this procedure. Untrained personnel should be removed from the spill area.

Large Spill & Leak: Persons not wearing protective equipment should be excluded from area of spill until clean-up is completed. Stop spill at source. Dike to prevent spreading. Pump to salvage tank.

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

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Same as EMERGENCY PROCEDURES.

SECTION 7: HANDLING AND STORAGE

GENERAL HANDLING Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Never use hot water. Never add water to acids. Always add acids to water.

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

STORAGE: Store in a tightly closed container, in cool, dry, well-ventilated area away from incompatible substances.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Phosphoric Acid	7664-38-2	1mg/m3	1 mg/m3
Nonylphenol Ethoxylate	9016-45-9	Not Established	Not Established
Water	7732-18-5		

ENGINEERING CONTROLS: Provide sufficient mechanical (general and /or local exhaust) ventilation to maintain exposure below TLV(s).

VENTILATION : Use only with adequate ventilation.

RESPIRATORY PROTECTION: If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

EYE PROTECTION: Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)



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SKIN PROTECTION/PROTECTIVE GLOVES: Wear resistant gloves such as: neoprene, nitrile rubber, polyvinyl chloride, polyethylene. To prevent skin contact, wear impervious clothing and boots.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear clean body-covering clothing. Chemically resistant protective clothing and boots may be required. Provide safety shower and eye wash station in work area.

WORK HYGIENIC PRACTICES: Establish good personal hygiene and work practices. Always wash hands and face thoroughly with soap and water before eating, drinking, smoking chewing gum or using the toilet.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE- PHYSICAL STATE:	Liquid
COLOR:	Blue
ODOR:	Cherry
ODOR THRESHOLD:	N/A
pH:	1
Notes: Acidic Solution	
PERCENT VOLATILE:	N/D
MELTING POINT:	N/A
FREEZING POINT:	N/A
DENSITY:	9.6 lbs/gal at (60°F)
BOILING POINT:	212°F Atmospheric pressure
FLASH POINT/METHOD USED:	None
EVAPORATION RATE:	<1 (n-Butyl Acetate = 1) Room Temperature
FLAMMABILITY (solid, gas):	N/A
FLAMMABILITY LIMITS:	N/A
VAPOR PRESSURE (mmHg):	N/D
VAPOR DENSITY (AIR = 1):	> 1 (Air = 1)
SPECIFIC GRAVITY (H2O = 1):	1.15 at (60°F)
SOLUBILITY IN WATER:	Completely Miscible.
VISCOSITY:	Thickened

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: None

STABILITY: Stable under ordinary conditions of use and storage.

CONDITIONS TO AVOID: Strong bases.

INCOMPATIBILITY (MATERIAL TO AVOID): Avoid contact with: alkali metals, strong alkalies. Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with air.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Oxides of phosphorus and carbon, acids of phosphorus and phosphine.

HAZARDOUS POLYMERIZATION: No. **CONDITIONS TO AVOID (POLYMERIZATION):** N/A

SECTION 11: TOXICOLOGICAL INFORMATION

EYES: Major burns to eyes. Can cause permanent skin damage. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure the cornea and cause blindness.

SKIN: Major burns to skin. Can cause permanent skin damage. Symptoms may include redness, burning, and swelling of skin, burns, and other skin damage.

INGESTION: Swallowing this material may be harmful or fatal. Symptoms include severe stomach and intestinal irritation (nausea, vomiting, diarrhea), abdominal pain, and vomiting of blood. Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury.



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INHALATION: Breathing of vapor or mist is possible. Breathing this material may be harmful or fatal. Symptoms may include severe irritation and burns to the nose, throat, and respiratory tract.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: No data found.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORT INFORMATION

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

CONTAINER SIZES(S): Quarts and 1 Gallon
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: III
LABEL STATEMENT: Corrosive

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): TSCA REGULATORY: This material is listed on the EPA TSCA Inventory of Chemical Substances. TSCA STATUS: This product is listed with TSCA.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): CERCLA RQ: 5,000 lbs. (Phosphoric Acid)

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 = D

REVISION DATE: 4/25/14

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.