Safety Data Sheet
Revision Date: 10/22/2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product Name:	**Mar-Tek 176**
Product Code:	MT176
Product Use:	**Dip tank cleaner for cleaning carbon steel**
Manufacturer:	Mar-Tek Industries
Address:	301 Industrial Drive, Forney Texas 75126
Phone:	(214) 350-9401
Emergency Telephone Number	**ChemTel. Inc. 1-800-255-3924**

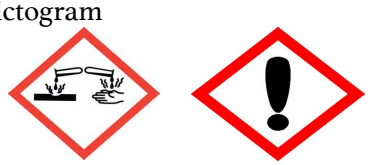
SECTION 2: Hazards Identification

GHS Classification of substance or mixture:

GHS Classification: Skin corrosion/irritation Category 1, 1A,1B,1C
Specific target organ toxicity-single exposure Category 3

GHS Label elements including hazards and precautionary statements:

Signal word: **DANGER**
Pictogram



Hazard statements:
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation; or
H336 May cause drowsiness or dizziness

Precautionary statements:

Prevention:

P260 Do not breathe dust or mists.
P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P271 Use only outdoors or in well-ventilated area.

Response:

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+361+354 IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
P363 Wash contaminated clothing before reuse.
P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P316 Get emergency medical help immediately.
P321 See treatment (Refer SDS section 4)
P305+354+338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P319 Get medical help if you feel unwell.

Storage:

P405 Store locked up.
P403+233 Store in a well-ventilated place. Place container tightly closed

Disposal:

P501 Dispose in accordance to local/regional/national/international regulation.
Supplemental hazard statements: Corrosive to eyes and skin. Irritating to respiratory system

SECTION 3: Composition/Information on Ingredients

Chemical Name:	Sodium Metasilicate
EC Number:	229-912-9
CAS Number:	6834-92-0
Content:	10-15%
Chemical Name:	Sodium Hydroxide
EC Number:	215-185-5
CAS Number:	1310-73-2
Content:	30-60%

Non-hazardous components: 25%

SECTION 4: First aid measure

Description of first aid measures
General Advice: Consult physician. Show this safety data sheet to the doctor in attendance.
If inhaled: Remove to fresh air and keep at rest in a position comfortable for breathing.
In case of skin contact (hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
In case of eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
If swallowed: Rinse mouth with water. DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult physician.
Most important symptoms and effect, both acute and delayed: Burning sensation, cough, wheezing, laryngitis, shortness of breath, spasm, inflammation and edema of the larynx, inflammation and edema of the bronchi, pneumonitis, pulmonary edema. This material is extremely destructive to tissue of the mucous membranes and upper respiratory tract eyes and skin.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Not combustible, therefore define extinguishing measures according to neighboring conditions.
Special protective measure: Not applicable. Inorganic material. Not combustible.
Further information: This product itself does not burn.
Specific hazard arising from the chemical: Sodium oxides, silicon oxide.

SECTION 6: Accidental release measures

Personal precaution, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapours, mist and gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions: Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up: Sweep up or vacuum up and place in appropriate closed container. Dike area to contain spill. Dilute spill with large amount of water and neutralize with dilute acid. Use a vacuum truck to pick up neutralized material for proper disposal. Flush area with water to remove trace residue. Dispose in accordance with appropriate law and regulation.

SECTION 7: Handling and storage

Precaution for safe handling: Avoid dust generation and provide for room ventilation during handling. Avoid breathing vapors, mist, fume or dust. Avoid contact with eyes, skin and clothing. Keep container closed when not in use.
Conditions for safe storage, including any incompatibilities: Store in a dry, well ventilated area, separate from acids, peroxides, metals, easily ignitable materials and other incompatibles. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen can be generated.

SECTION 8: Exposure controls/personal protection

Engineering controls: Provide local exhaust to meet TLV requirements if making a solution or grinding up and mist or dust is generated. Ventilation facilities should be corrosion resistant. Localized ventilation should be used to control dust levels.
Occupational exposure controls:

Components	Exposure limits	Basis	Entity
Sodium metasilicate	Not established		
Sodium hydroxide	2mg/m3	CEIL	ACGIH
	2mg/m3	PEL	OSHA
	2mg/m3	CEIL	NIOSH

Personal protective equipment
Eye/face protection: Safety glasses or approved equivalent as necessary to minimize eye contact.
Skin: Wear alkaline resistant gloves (natural latex).
Inhalation: Use a well-ventilated area. If mist is being generated and exceeds the TLV a respiratory protection program meeting OSHA 1910.134 requirements must be followed.
General hygiene consideration: Use proper industrial hygiene practices to minimize hazardous exposure. Wash hands after handling this material before eating and smoking.

SECTION 9: Physical and chemical properties

Appearance
- Physical state: Powder
- Color: Light tan

Odor: Aromatic
Odor threshold: Not available
pH: Not available
Melting point/freezing point: Not available
Initial boiling point/boiling range: Not available
Flash point: Not applicable
Evaporation rate: Not available
Flammability (solid, gas) No data available
Upper/Lower flammability or explosive limits
- Flammability limit-lower (%): No data available
- Flammability limit-upper (%): No data available

Vapor pressure: No data available
Vapor density: No data available
Solubility (ies): Complete
Specific gravity: Not applicable
Partition coefficient
- (n-octanol/water): Not available

Auto-ignition temperature: Not available
Decomposition temperature: Not available

SECTION 10: Stability and reactivity

Chemical stability: Stable
Possibility of hazardous reactions: No data available
Condition to avoid: None known
Incompatible materials: Strong acids, strong oxidizers, aluminum, zinc and tin.
Hazardous decomposition: No hazardous decomposition products.

SECTION 11: Toxicological information

Information on likely route and sign and symptoms of exposure
Acute toxicity: LD50 Oral-rat-1.153mg/kg
Ingestion: Harmful if swallowed.
Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes respiratory tract irritation
Skin contact: May be harmful if absorbed through skin. Causes skin burns.
Eye contact: Cause eye burns
Potential health effect
Eyes: Causes eye irritation
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation
Skin: Harmful if absorbed through skin. Causes skin irritation.
Ingestion: May be harmful if swallowed.
Chronic toxicity No data available
Teratogenicity Not available
Mutagenicity Not available
Embryotoxicity: Not available
Specific target organ toxicity No data available
Acute toxicity
- Skin: Corrosive –rabbit-severe irritation-24hrs

Eyes: Not available
Respiratory: Not available
Ingestion: Not available

Carcinogenicity

IARC Not classified as to its carcinogenicity to human.

ACGIH No component of this product presents at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by ACGIH.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

SECTION 12: Ecological information

Ecotoxicity

Aquatic vertebrate	Not available
Aquatic invertebrate	Not available
Terrestrial	Not available
Persistence and degradability	Not available
Bio-accumulative potential	Not available
Mobility in soil	Not available
PBT and vPVB Assessment	Not available
Other adverse effects	Slightly toxic to aquatic life

SECTION 13: Disposal consideration

Waste disposal method: Dispose of in accordance with federal, state and local authorities.
Contaminated packaging: Dispose of container and unused content in accordance with federal, state and local requirements.

SECTION 14: Transportation information

US Department of Transportation

Shipping Name:	Corrosive solid, basic, inorganic (sodium hydroxide)
Hazard Class:	8
UN Number:	UN3263
Packaging Group:	PGII
Label statement:	Corrosive
Marine pollutant:	NO

SECTION 15: Regulatory information

TSCA inventory status	All ingredients are listed on the TSCA inventory
DSCL (EEC)	All ingredients are listed on the DSCL inventory
California proposition 65	Listed (Sodium hydroxide)
Massachusetts Right to Know Act	Listed (Sodium hydroxide)
New Jersey Right to Know Act	Listed (Sodium hydroxide)
Pennsylvania Right to Know Act	Listed (Sodium hydroxide)
SARA 302	Not listed
SARA 304	Not listed
SARA 311	Sodium hydroxide
SARA 312	Sodium hydroxide
SARA 313	Not listed
WHMIS Canada	Class E; corrosive solid

SECTION 16: Other information

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NFA Ratings		HMIS
Health	3	Health
Flammability	0	Flammability
Reactivity	1	Reactivity

Abbreviation and acronyms

ACGIH American Conference of Governmental Industrial Hygienists

CAS	Chemical Abstract Service
CEIL	Ceiling
DOT	Department of Transportation
GHS	Globally Harmonized System
HCS	Hazards Communication Standards
HMIS	Hazardous Materials Identification System
IDLH	Immediate Dangerous to Life or Health
NE	Not Established
NIOSH	National Institute of Occupational Safety and Health
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
REL	Recommended Exposure Limit
SARA	Superfund amendments and Reauthorization Act
STEL	Short Term Limit
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Material Information System
WEEL	Workplace Environmental Exposure Levels

Disclaimer: Mar-Tek Industries provide the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This documentation is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

----------**END OF SDS**----------