



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

Product Name: Mar-Tek 28
Product Code: MT028
Product Use: Spray type heavy cleaner for ferrous metals.
Manufacturer: Mar-Tek Industries
Address: 301 Industrial Drive, Forney Texas 75126
Phone: (214) 350-9401
Emergency Telephone No.: ChemTel Inc. (800) 255-3924 and +1(813) 248-0585

SECTION 2: Hazards Identification

Classification of substance or mixtures:

GHS Classifications:	Corrosive to metal Skin corrosion/irritation Serious eye damage	Category 1 Category 1A, 1B Category 1
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GHS Label elements, including hazards and precautionary statements:

Signal word: DANGER
Pictogram



Hazard statements:	H290	May be corrosive to metal
	H314	Causes severe skin burns and eye damage

Precautionary statements:

Prevention:	P260	Do not breathe dust or mist
	P264	Wash thoroughly after handling.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response:	P301+P330+P331:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P303+P361+P353:	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304+340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
	P304+340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

	P310	Immediately call a POISON CENTER/doctor/physician.
	P321	Specific treatment (Refer section 4)
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
Storage:	H406	Store in a corrosion resistant container with
	P405	Store locked up.
Disposal:	P501	Dispose contents/container in accordance with local, regional, national and international regulations.

Supplemental hazard statements: Corrosive to eyes and skin

SECTION 3: Composition/Information on Ingredients

Chemical Name: Sodium hydroxide
Common Names: Caustic Soda
EINECS No. 215-185-5
CAS No.: 1310-73-2
Content (w/w): <50-60%

Other nonhazardous components: 40-50%

SECTION 4: First aid measure

Description of first aid measures

General Advise: Consult physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult physician.

In case of skin contact: Take off contaminated clothing and shoes immediately. Wash it off with soap and plenty of water. Consult physician.

In case of eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove contact lenses if present and easy to do. Get medical attention if irritation occurs.

If swallowed: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. 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: Carbon dioxide (CO₂), foam, extinguishing powder, in cases of larger fires, water spray should be used.

Unsuitable extinguishing media: High volume of water jet.

Special protective measure: In the event of fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full piece operated in the pressure demand or other possible pressure mode.

Further information: This product itself does not burn.

Specific hazard arising from the chemical: Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen and traces of hydrogen cyanide. In the event of fire and /or explosion do not breathe fumes.

SECTION 6: Accidental release measures

Personal precaution, protective equipment and emergency procedures: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

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 hydroxide	2mg/m3	TLV	ACGIH
	2mg/m3	PEL	OSHA

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:	Liquid
Color:	Clear colorless liquid
Odor:	Slight characteristic
Odor threshold:	Not available
pH:	12.9
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):	Moderate

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: React with (some) metals e.g, aluminum, magnesium, zinc: release of highly flammable gases/vapours (hydrogen). On heating, release of corrosive gases/vapours. React violently with acids.

Condition to avoid: Will form explosive hydrogen gas on contact with aluminum.

Incompatible materials: Strong acids, strong oxidizers, and other combustible materials.

Hazardous decomposition: Oxides of carbon and other unknown organics.

SECTION 11: Toxicological information

Information on toxicological effects: Acute oral, dermal, respiratory: No data available.

Potential health effects:

Ingestion: Corrosive! Swallowing may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, and fall in blood pressure. Damage may appear days after exposure.

Inhalation: Severe irritant. Effects from inhalation of dust or mist vary from mild irritation to serious damage of upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat or running nose. Severe pneumonitis may occur.

Skin contact: Corrosive, contact with skin can cause irritation or severe burns and scarring with greater exposure.

Eye contact: Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

Chronic exposure: Prolonged contact with diluted solutions or dust has a destructive effect upon tissue.

Aggravation of pre-existing conditions: Person with pre-existing skin disorders or eye disease may be more susceptible to the effects of this substance.

Chronic toxicity No data available

Teratogenicity Not available

Mutagenicity Not available

Embryotoxicity Not available

Specific target organ toxicity- Single exposure (GHS) No data available

Repeated exposure (GHS) No data available

Numerical measures of toxicity: Cancer lists: NTP Carcinogen

Ingredient: Sodium hydroxide (1310-73-2)

Known: No

Anticipated: No

IARC Category: None

Acute toxicity: Sodium hydroxide; irritation data: skin, rabbit: 500 mg/24 h severe

Rabbit: 50-mg/24 h severe

SECTION 12: Ecological information

Ecotoxicity: Harmful to aquatic life. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

EC50 Water flea (Ceriodaphnia dubia) 34.59 mg/l 48 h

LC50 Western mosquito fish (Gambusia affinis) 125mg/l 96 h

Persistence and degradability: Expected to readily biodegrade

Bio-accumulative potential: No further relevant information available

Mobility in soil: During movement through soil some ion exchange will occur. Also, some of the hydroxide may remain in the aqueous phase and will move downward through soil in the direction of groundwater flow.

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: Sodium hydroxide mixture
Hazard Class: 8
UN Number: UN3263
Packaging Group: PGII
Label statement: Corrosive

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	Not 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

SECTION 16: Other information

Revision Date: 10/24/2014

Revision was made in sections: General revision

NFPA Ratings

Health 3
Flammability 0
Reactivity 1
Specific Hazard N/A

HMIS Ratings

Health 3
Flammability 0
Reactivity 1
Personal None

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-----