



SAFETY DATA SHEET

Revision Date 01/30/2015

REVISION NUMBER: 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name F-400, High Performance Chlorinated Foam Cleaner

Other means of identification

Product code 118228

UN/ID No. 3266

Synonyms NONE

Recommended use of the chemical and restrictions on use

Recommended Use Cleaning agent.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Rochester Midland Corporation
155 Paragon Drive
Rochester, New York 14624 USA

Emergency telephone number

EMERGENCY TELEPHONE INFOTRAC: 1-800-535-5053
OUTSIDE U.S.: +1-352-323-3500

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

Label elements

Emergency Overview

DANGER

Hazard statements

Causes severe skin burns and eye damage

May be corrosive to metals



Appearance Light yellow liquid.

Physical state Liquid

Odor Slight chlorine

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep only in original container

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
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/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
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
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up
Store in corrosive resistant container

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No information available

Other Information

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

Unknown Acute Toxicity 5.18% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION CAS#	CAS No.	%	TRADE SECRET
Sodium hypochlorite	7681-52-9	1 - 5	*
SODIUM HYDROXIDE	1310-73-2	1 - 5	*
POTASSIUM HYDROXIDE	1310-58-3	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First aid measures**

General advice	Immediately call a POISON CENTER or doctor/physician.
Eye contact	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/physician.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
Inhalation	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.
Ingestion	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Water. Carbon dioxide (CO₂).

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact NONE.

Sensitivity to Static Discharge NONE.

Protective equipment and precautions for firefighters

CORROSIVE MATERIAL. Avoid exposure to mist and splashes. Cool exposed containers with water spray. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Wear adequate personal protective equipment, see Section 8, Exposure Controls/Personal Protection.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Dike to contain. Pick up with absorbant material. Put in suitable container for disposal.

Methods for cleaning up Pick up and transfer to properly labeled containers. Flush residue with water.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling DANGER: Concentrated, alkaline liquid. Avoid contact with eyes, skin and clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Contents may develop pressure upon prolonged storage; loosen closure cautiously before opening. Empty containers may retain product residue, follow MSDS/label precautions even after container is emptied. Contact with certain food sugars can release hazardous amounts of carbon monoxide gas in enclosed vessels.

Incompatible materials

Contact with acids and acid-containing cleaners, such as rust removers, vinegar, and toilet bowl cleaners may generate hazardous gases, such as chlorine, along with heat. Interaction with ammonia-containing materials may liberate ammonia gas or chloramine derivatives of ammonia. Do not mix with: Organic matter. Reducing agents. Avoid contact with aluminum, zinc, other soft metals or galvanized metals. Reaction will generate hydrogen gas. This gas is flammable and/or explosive in presence of ignition source.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

PRODUCT COMPOSITION CAS#	ACGIH TLV	OSHA PEL	NIOSH IDLH
SODIUM HYDROXIDE 1310-73-2	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³ TWA: 2 mg/m ³	10 mg/m ³
POTASSIUM HYDROXIDE 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	-

Appropriate engineering controls**ENGINEERING CONTROLS**

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Goggles and face shield are recommended to minimize eye contact.

Skin and body protection

Nitrile, neoprene, or other appropriate gloves are recommended to minimize hand skin contact. Appropriate protective clothing as needed to prevent skin contact. Liquid may penetrate leather shoes and cause delayed burns. It is the responsibility of the end user of this product to determine level of PPE required that is consistent with safe use of this product.

RESPIRATORY PROTECTION

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Slight chlorine
Appearance	Light yellow liquid.	Odor threshold	No information available
Color	Light Yellow		
Property	Values	Remarks • Method	
pH	13.7		
Melting point/freezing point	No information available		
Boiling point / boiling range	100 °C / 212 °F		
Flash point	-	None to boiling.	
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor density	No information available		

Specific gravity	1.142 - 1.148
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Other Information

Softening point	No information available
VOC (EPA METH.24) (G/L):	0
Density	9.55 lbs/gal
Bulk density	No information available

10. STABILITY AND REACTIVITY

REACTIVITY

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

CONDITIONS TO AVOID

Extremes of temperature and direct sunlight.

Incompatible materials

Contact with acids and acid-containing cleaners, such as rust removers, vinegar, and toilet bowl cleaners may generate hazardous gases, such as chlorine, along with heat. Interaction with ammonia-containing materials may liberate ammonia gas or chloramine derivatives of ammonia. Do not mix with: Organic matter. Reducing agents. Avoid contact with aluminum, zinc, other soft metals or galvanized metals. Reaction will generate hydrogen gas. This gas is flammable and/or explosive in presence of ignition source.

Hazardous Decomposition Products

Chlorine gas. Oxygen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Causes severe skin burns and eye damage
Inhalation	Causes burns.
Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin contact	Causes burns.
Ingestion	Causes burns.

PRODUCT COMPOSITION CAS#	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hypochlorite 7681-52-9	= 8200 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	-
SODIUM HYDROXIDE 1310-73-2	-	= 1350 mg/kg (Rabbit)	-

POTASSIUM HYDROXIDE 1310-58-3	= 214 mg/kg (Rat)	-	-
----------------------------------	---------------------	---	---

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

PRODUCT COMPOSITION CAS#	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 5.18% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 15486 mg/kg

ATEmix (dermal) 28150 mg/kg

12. ECOLOGICAL INFORMATION**Ecotoxicity**

8.63% of the mixture consists of component(s) of unknown hazards to the aquatic environment

PRODUCT COMPOSITION CAS#	Algae/aquatic plants	Fish	Crustacea
Sodium hypochlorite 7681-52-9	-	4.5 - 7.6: 96 h Pimephales promelas mg/L LC50 static 0.06 - 0.11: 96 h Pimephales promelas mg/L LC50 flow-through 0.4 - 0.8: 96 h Lepomis macrochirus mg/L LC50 static 0.28 - 1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.05 - 0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.03 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.18 - 0.22: 96 h Oncorhynchus mykiss mg/L LC50 static	0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static
SODIUM HYDROXIDE 1310-73-2	-	45.4: 96 h Oncorhynchus mykiss mg/L LC50 static	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

PRODUCT COMPOSITION CAS#	Partition coefficient
POTASSIUM HYDROXIDE 1310-58-3	0.83

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

UN/ID No. 3266
Proper shipping name CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (POTASSIUM HYDROXIDE, SODIUM HYPOCHLORITE SOLUTION)
Hazard Class 8
Packing Group II
Description 5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not Comply
ENCS	Does not Comply
IECSC	Complies
KECL	Does not Comply
PICCS	Complies
AICS	Does not Comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

ACUTE HEALTH HAZARD	YES
CHRONIC HEALTH HAZARD	No

FIRE HAZARD	No
Sudden release of pressure hazard	No
REACTIVE HAZARD	YES

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

PRODUCT COMPOSITION CAS#	Hazardous Substances RQs (in LBS)	U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
Sodium hypochlorite 7681-52-9	100	
SODIUM HYDROXIDE 1310-73-2	1000	
POTASSIUM HYDROXIDE 1310-58-3	1000	

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

PRODUCT COMPOSITION CAS#	NJRTK:	MARTK:	PARTK:
Sodium hypochlorite 7681-52-9	Listed	Listed	Listed
SODIUM HYDROXIDE 1310-73-2	1706	Listed	Listed
POTASSIUM HYDROXIDE 1310-58-3	1571	Listed	Listed

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION**NFPA**

Health hazards 3

Flammability 0

Instability 1

Physical and Chemical Properties ALKALI

HMIS

Health hazards 3

Flammability 0

Physical hazards 1

Personal protection D

Revision Date

01/30/2015

Revision Note

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

*** END OF SDS ***