



A CSW Industrials Company

SAFETY DATA SHEET

D-FACTOR™
High strength cleaner

SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product name

D Factor

Product Codes

11060

Chemical Family

Inorganic Base

Use

Condenser/Evaporator Coil Cleaner

Manufacturer's Name

RectorSeal LLC
2601 Spenwick Drive
Houston, Texas 77055 USA

Date of validation

December 30, 2019

Date of Preparation

December 30, 2019

HMIS Codes

Health 3

Flammability 0

Reactivity 1

PPI D

Emergency Telephone No.

Chemtrec 24 Hours
(800) 424-9300 USA
(703) 527-3887 International

Technical Service Telephone No.

(800) 231-3345 or (713) 263-8001

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Corrosive to metals

GHS CLASSIFICATION

Skin Corrosion/irritation (Category 1A)

Serious Eye Damage/Eye Irritation (Category 1)

Specific target organ toxicity (single exposure) (Category 3)

Target Organs - Respiratory system.

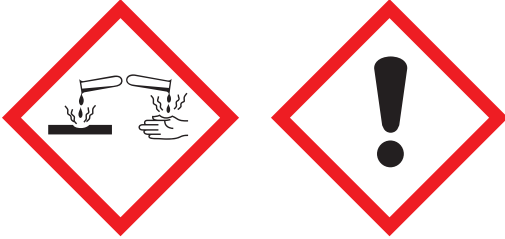
Physical Hazards

Corrosive, Category 1

Environmental

Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements



GHS05: Corrosive
GHS07: Exclamation Mark
Signal Word: Danger

Hazard Statements:

H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H355 - May cause respiratory irritation.
H402 - Harmful to aquatic life.

Precautionary Statements:

P234 - Keep only in original container
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
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): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 - 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/doctor.
P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.
P405 - Store locked up.
P406 - Store in corrosive resistant stainless steel container with a resistant inner liner.
P501 - Dispose of contents/ container to an approved waste disposal plant.

PHYSICAL HAZARDS

Exposure to human tissue will result in irritation and chemical burns.

ROUTE OF EXPOSURE, SIGNS AND SYMPTOMS

INHALATION - Exposure to human tissue will result in irritation and chemical burns.

EYE CONTACT - Corrosive, contact causes severe eye burns.

SKIN CONTACT - Corrosive to skin.

INGESTION - Poison! Swallowing large quantities can cause death and burns to digestive system.

SUMMARY OF CHRONIC HAZARDS - Exposure to human tissue will result in irritation and chemical burns.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE - Individuals with pre-existing or chronic diseases of the eyes, skin or persons with chemical sensitivity may have increased susceptibility to excessive exposures.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient: Potassium hydroxide

Percentage By Weight: 1-5

CAS Number: 1310-58-3

EC#: 215-181-3

Ingredient: Polyethylene glycol monoundecyl ether

Percentage By Weight: 1 -3

CAS Number: 34398-01-1

EC#: 500-084-3

Ingredient: Sodium metasilicate

Percentage By Weight: 1 -5

CAS Number: 6834-92-0

EC#: 229-912-9

Ingredient: Sodium xylenesulphonate

Percentage By Weight: 1 -5

CAS Number: 1300-72-7

EC#: 215-090-9

Ingredient: Pentasodium triphosphate

Percentage By Weight: 1 -5

CAS Number: 7758-29-4

EC#: 231-838-7

SECTION 4 - FIRST AID MEASURES

- IF INHALED: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.
- IF ON SKIN: Flush with large amounts of water. If irritation or burns occur, seek immediate medical attention.
- IF IN EYES: Flush with large amounts of water for at least 15 minutes. Get medical attention if irritation persists.
- IF SWALLOWED: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing media

Use agents suitable for surrounding fires.

Special fire fighting procedures

Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10). Dike area as run-off may create additional environmental contamination.

Fire and explosion hazards

Decomposition forms toxic fumes of sodium oxide. Flammable gas may be produced on contact with metals.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Keep people away. Wear chemical protective clothing. Stop discharge if possible. Isolate and remove discharged material. Flush and clean area with water.

SECTION 7 - HANDLING AND STORAGE

Precautions to be taken in handling and storing:

Keep container closed and upright when not in use. Store only in polyethylene or glass containers. DO NOT USE METAL CONTAINERS.

Other precautions:

Do not permit workers to handle D-Factor without proper training or proper protective equipment. Store in well-sealed containers, which are protected from physical damage. Empty containers may contain residues and vapors; treat as if full and observe all product precautions. Do not reuse container. KEEP OUT OF REACH OF CHILDREN.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient	Units
Potassium hydroxide	
ACGIH TLV	CL 2 mg/m ³
OSHA PEL	CL 2 mg/m ³
ACGIH TLV	N/D
OSHA PEL	N/D

RESPIRATORY PROTECTION (SPECIFY TYPE): In confined, poorly ventilated areas, use NIOSH/MSHA approved self-contained breathing apparatus. None required for normal use in adequately ventilated areas where TLV is not exceeded.

VENTILATION - LOCAL EXHAUST: Acceptable

SPECIAL: Explosion proof

MECHANICAL (GENERAL): Preferable

OTHER: N/A

PROTECTIVE GLOVES: Rubber or neoprene

EYE PROTECTION: Chemical splash goggles (ANSI Z-87.1 or equivalent)

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Coveralls recommended.

WORK/HYGIENIC PRACTICES: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: >212 F (>100 C) @ 760mm Hg

Specific Gravity (H₂O = 1): 1.2

ph 12 +/- 1

Vapor Pressure (mm Hg): 1 @ 77 F (20 C)

Melting Point: N/A

Vapor Density (Air = 1): >1

Evaporation Rate (Ethyl Acetate = 1): <1

Appearance/Odor: Yellow/Gold Liquid / Little or No Odor

Solubility In Water: Soluble

Flash Point: None

Lower Explosion Limit: N/D

Upper Explosion Limit: N/D

Volatile Organic Compounds (VOC) Content 0% or (0 g/L)
(Theoretical Percentage By Weight):

SECTION 10 - STABILITY AND REACTIVITY

Stability:

Stable

Conditions to avoid:

Heat, sparks, open flames

Incompatibility (materials to avoid):

Acids, flammable liquids, organics, halogens, metals, nitromethane. When wet, attacks chemically active metals such as aluminum, tin, lead, and zinc to produce flammable hydrogen gas.

Hazardous decomposition products:

Decomposition forms toxic fumes of sodium oxide.

Hazardous polymerization:

Will not occur.

SECTION 11 - TOXICOLOGY INFORMATION

Chronic Health Hazards:

No ingredient in this product is an IARC, NTP, or OSHA listed carcinogen

Toxicology Data:

Ingredient name

Potassium hydroxide

Oral-Rabbit, adult	LDLo:500 mg/kg
Inhalation-Rat	LC50: N/D

Potassium Silicate

Oral-Rabbit, adult	LD50: N/D
Inhalation-Rat	LC50: N/D

SECTION 12 - ECOLOGICAL INFORMATION

Ecology Data:

Ingredient name

Potassium hydroxide

Food Chain Concentration Potential	None
Waterfowl Toxicity	N/D
BOD	None
Aquatic Toxicity	125 ppm/96 hr/mosquito fish/TLm

Potassium Silicate

Food Chain Concentration Potential	N/D
Waterfowl Toxicity	N/D
BOD	N/D
Aquatic Toxicity	N/D

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Classification: Corrosive(D002)

Disposal Method: Neutralization

RCRA classified hazardous waste. Dispose of absorbed materials and liquid waste in accordance with all local, state and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

DOT: UN1760, Corrosive Liquids n.o.s (Potassium Hydroxide & Glycol Ether), Class 8, PG III, Limited Quantity or (LTD-QTY) ERG#154 Gallons and less: Limited Quantity or (LTD-QTY)

OCEAN (IMDG): UN1760, Corrosive Liquids n.o.s (Potassium Hydroxide & Glycol Ether), Class 8, PG III, Limited Quantity or (LTD-QTY) EMS-No: F-A, S-B

AIR (IATA): UN1760, Potassium Hydroxide, Solution, Class 8, PG III, ERG#154

SECTION 15 - REGULATORY INFORMATION

Regulatory Data

Ingredient: Sodium Hydroxide

SARA 313 No

TSCA Inventory Yes

CERCLA RQ 1000 lb.

RCRA Code N/A

Ingredient: Potassium Silicate

SARA 313 No

TSCA Inventory Yes

CERCLA RQ N/A

RCRA Code N/A

SECTION 16 - OTHER INFORMATION

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made. Consult RectorSeal for further information: (713) 263-8001