SAFETY DATA SHEET

ECO CLEAN Dish Machine Detergent

Product codes: D11030, D11089
Version 1 | Issue date 2026-10-26 | Supersedes Earlier SDS, unnumbered

SECTION 1. IDENTIFICATION

Product identifier

Product name ECO CLEAN Dish Machine Detergent

Other means of identification EcoClean Dish Machine Detergent; ECO CLEAN Dishwasher Machine Detergent; Dish Machine Detergent

Product code	Package	Net contents	UPC
D11030	Case of 4 jugs	4 x 1 US gal (3.785 L)	787302110308
D11089	Pail	5 US gal (18.93 L)	787302110896

Recommended use and restrictions on use

Recommended use Liquid detergent for commercial and industrial automatic dishwashing machines, fed by automatic dispensing equipment. Follow the machine instructions for use and dilution; maximum efficacy is at about 2% dilution.

Restrictions on use For professional use in automatic dishwashing machines with dispensing equipment only. Not for hand dishwashing or for household dishwashers. Do not use on aluminum, zinc, tin or galvanized metal. Do not mix with acids, chlorine bleach or other cleaning products or chemicals.

Manufacturer or supplier

Company Gascó Industrial Corp.
Address Calle A Lote 3, Rincón Industrial Park, Gurabo, PR 00778
Mailing address PO Box 1360, Gurabo, PR 00778
Telephone (787) 737-4000
Email orders@gascoindustrial.com
Website www.gascoindustrial.com

Emergency telephone number

Poison Control 1-800-222-1222 (24 hours)

SECTION 2. HAZARD(S) IDENTIFICATION

Classification of the chemical

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

Label elements



Signal word

Danger

Hazard statements

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Precautionary statements

Prevention

P102 Keep out of reach of children.
P234 Keep only in original packaging.
P260 Do not breathe mists or vapors.
P264 Wash hands 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): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor.

P321 Specific treatment (see Section 4 of this Safety Data Sheet).

P363 Wash contaminated clothing before reuse. **P390** Absorb spillage to prevent material damage.

Storage

P405 Store locked up. **P406** Store in a corrosion resistant container.

Disposal

P501 Dispose of contents/container in accordance with local, state and federal regulations.

Other hazards

Hazards of chemical reaction products None known under the directions for use. Mixing with acids or acid cleaners generates heat and spattering, mixing with ammonium compounds releases ammonia gas, and contact with aluminum, zinc, tin or galvanized metal releases flammable hydrogen gas (see Section 10).

Hazards not otherwise classified (HNOC) None known.

Other hazards which do not result in classification Mist or spray of the product is corrosive to the nose, throat and respiratory tract. Contact with aluminum, zinc, tin or galvanized metal can release flammable hydrogen gas. Spilled product makes floors slippery.

Unknown acute toxicity Approx. 2%, 4% and 11% of the mixture consist of ingredients of unknown acute oral, dermal and inhalation toxicity, respectively.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance or mixture Mixture

Chemical name	CAS number or other identifier	Concentration (%)	GHS classification
Builder	Trade secret	3 to 7 (w/w)	Skin corrosion/irritation, Category 2 (H315); Serious eye damage/eye irritation, Category 2A (H319); Specific target organ toxicity, single exposure (respiratory tract irritation), Category 3 (H335)
Hydrotrope	Trade secret	1 to 5 (w/w)	Serious eye damage/eye irritation, Category 2A (H319)
Alkaline salt	Trade secret	1 to 5 (w/w)	Serious eye damage/eye irritation, Category 2A (H319)
Sodium hydroxide	1310-73-2	1 to 5 (w/w)	Corrosive to metals, Category 1 (H290); Skin corrosion/irritation, Category 1A (H314); Serious eye damage/eye irritation, Category 1 (H318); Hazardous to the aquatic environment, acute hazard, Category 3 (H402)
Water	7732-18-5	Balance	Not classified

Concentrations are percent by weight. The specific chemical identities and exact percentages of the builder, hydrotrope and alkaline salt have been withheld as a trade secret under 29 CFR 1910.1200(i), and their concentrations are given as ranges. The exact percentage of sodium hydroxide has been withheld as a trade secret under 29 CFR 1910.1200(i); its concentration is given as a range.

SECTION 4. FIRST-AID MEASURES

Inhalation Move the person to fresh air and keep at rest in a position comfortable for breathing. If the person is not breathing, call 911 or an ambulance, then give artificial respiration. Call Poison Control at 1-800-222-1222 or a doctor for further treatment advice.

Skin contact Take off contaminated clothing and shoes immediately. Rinse skin immediately with plenty of water or shower for 15 to 20 minutes. Call Poison Control at 1-800-222-1222 or a doctor immediately for treatment advice. Wash contaminated clothing before reuse; discard contaminated leather shoes and belts.

Eye contact Immediately hold the eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. Call Poison Control at 1-800-222-1222 or a doctor immediately and get medical attention without delay.

Ingestion Call Poison Control at 1-800-222-1222 or a doctor immediately for treatment advice. Rinse mouth with water. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do

so by Poison Control or a doctor. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, acute and delayed Eyes: severe pain, redness and burns; may cause permanent eye damage, including blindness. Skin: redness, pain and chemical burns; alkali burns may not hurt at first and deepen if not washed off. Ingestion: burns of the mouth, throat and stomach, pain, nausea and vomiting. Inhalation of mist: burning of the nose and throat, coughing and shortness of breath.

Immediate medical attention and special treatment Treat as an alkali burn. Do not attempt to neutralize. Probable mucosal damage may contraindicate the use of gastric lavage. After ingestion, assess for injury to the esophagus and stomach. Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media The product does not burn. Use extinguishing media suitable for the surrounding fire. Use water spray to cool exposed containers.

Unsuitable extinguishing media Do not use a solid water stream; it may scatter the corrosive liquid.

Specific hazards arising from the chemical Not flammable. The product is a water-based solution and has no flash point. Contact with aluminum, zinc, tin or galvanized metal can release flammable hydrogen gas. Containers may rupture when heated.

Hazardous combustion products When the dried residue is involved in a fire: carbon oxides, sulfur oxides, phosphorus oxides and sodium oxides.

Special protective equipment and precautions for fire-fighters Wear positive-pressure self-contained breathing apparatus and full protective fire-fighting gear, with chemical-resistant clothing where contact with the product is possible. Cool containers exposed to fire with water spray from a safe distance. Contain runoff from fire control; it is alkaline and corrosive.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Keep unprotected personnel away. Ventilate the area. Avoid contact with eyes, skin and clothing and avoid breathing mist. Wear the protective equipment listed in Section 8, including goggles, a face shield, chemical-resistant gloves and boots. Spilled product makes floors very slippery.

Environmental precautions Prevent entry into drains, sewers and waterways; the undiluted product is strongly alkaline and its high pH harms aquatic life (see Section 12). Notify the authorities if the product reaches sewers or waterways, as required by applicable regulations.

Methods and materials for containment and cleaning up Stop the leak if it can be done without risk. Contain the spill with sand, earth or another inert absorbent. Collect the absorbed material in closed, labeled plastic containers for disposal. Rinse the area with plenty of water and prevent the rinse water from entering drains unless local rules allow it.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling Do not get in eyes, on skin or on clothing. Do not breathe mist or spray. Wear the protective equipment listed in Section 8 when connecting, changing or refilling containers on dispensing equipment and whenever the undiluted product is handled. Use only in automatic dishwashing machines with dispensing equipment, as directed on the label. Do not mix with acids, chlorine bleach or other cleaning products or chemicals. Keep the product away from aluminum, zinc, tin and galvanized metal. Wash thoroughly with soap and water after handling.

Conditions for safe storage, including any incompatibilities Store in the original, closed container in a cool, well-ventilated area, out of direct sunlight and away from heat. Store locked up, out of reach of children. Protect from freezing. Keep away from acids and the other incompatible materials listed in Section 10. Store away from food and food packaging materials. Do not store in aluminum, galvanized or other reactive metal containers; the original plastic containers are suitable.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Component	CAS number	OSHA PEL	ACGIH TLV	NIOSH REL	IDLH
Sodium hydroxide	1310-73-2	2 mg/m³ TWA	2 mg/m³ ceiling	2 mg/m³ ceiling	10 mg/m³

Components without established occupational exposure limits: Builder, Hydrotrope, Alkaline salt, Water.

Exposure controls and personal protective equipment

Other exposure guidelines No other ingredient present at 0.1% or more has an OSHA, ACGIH or NIOSH limit.

Engineering controls General ventilation is adequate for use as directed; the product is fed to the machine by closed dispensing equipment. Provide an eyewash station and safety shower close to where containers are connected to dispensing equipment or the undiluted product is handled.

Eye and face protection Chemical splash goggles when handling the undiluted product, such as when changing containers or filling dispensers. Add a face shield when pouring or wherever splashing is likely.

Hand protection	Alkali-resistant gloves, such as nitrile, neoprene, butyl rubber or polyvinyl chloride. Confirm breakthrough time with the glove manufacturer for the conditions of use.
Body protection	Long sleeves and a chemical-resistant apron when handling the undiluted product; chemical-resistant boots where splashing is likely.
Respiratory protection	Not normally required when used as directed with dispensing equipment. If mist is generated in an enclosed area and exposure may exceed the limits, use a NIOSH-approved respirator with P100 particulate filters, under a respiratory protection program that meets 29 CFR 1910.134.
General hygiene	Wash thoroughly with soap and water after handling and before eating, drinking or smoking. Remove contaminated clothing and wash it before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	**Color**	Red
Odor	Little or no odor	**Odor threshold**	No data available
Melting point/freezing point	No data available	**Initial boiling point and boiling range**	Approx. 101 °C (214 °F)
Flammability	Not flammable	**Flammability limits in air**	Not applicable
Flash point	No flash point (water-based solution)	**Auto-ignition temperature**	Not applicable (water-based solution)
Decomposition temperature	No data available		
pH	12.4 to 12.6 measured (undiluted, at the upper limit of the meter); calculated above 13		
Kinematic viscosity	Approx. 9 mm²/s (thin liquid)	**Solubility in water**	Completely miscible
Partition coefficient n-octanol/water (log value)	No data available		
Vapor pressure	Approx. 2.3 kPa (17 mmHg) at 20 °C (68 °F), mainly water		
Evaporation rate	No data available		
Density	1.08 to 1.09 g/cm³ (9.0 to 9.1 lb/US gal), measured		
Relative density (water = 1)	1.08 to 1.09	**Relative vapor density (air = 1)**	Approx. 0.6, as water vapor
Particle characteristics	Not applicable		

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Reacts with acids, generating heat. Corrodes aluminum, zinc, tin and galvanized metal, releasing flammable hydrogen gas.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Contact with strong acids causes a vigorous reaction with heat and spattering. Contact with ammonium salts releases ammonia gas. Contact with aluminum, zinc, tin or galvanized metal releases flammable hydrogen gas. Hazardous polymerization does not occur.
Conditions to avoid	Freezing, heat and contact with incompatible materials.
Incompatible materials	Acids and acid cleaners, chlorine bleach, ammonium salts, strong oxidizing agents, and aluminum, zinc, tin, galvanized metal and other reactive metals.
Hazardous decomposition products	None expected under normal conditions of storage and use. Hydrogen in contact with reactive metals. When heated to dryness or burned: carbon oxides, sulfur oxides, phosphorus oxides and sodium oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely routes of exposure	Eye contact, skin contact, inhalation of mist or spray, and ingestion.
Symptoms	Eyes: severe pain, redness and burns; may cause permanent damage, including blindness. Skin: redness, pain and chemical burns; alkali burns may not hurt at first. Ingestion: burns of the mouth, throat and stomach, pain, nausea and vomiting. Inhalation of mist: burning of the nose and throat and coughing.
Delayed and immediate effects and chronic effects	Immediate: severe burns of the eyes, skin and mucous membranes. Delayed: alkali burns may deepen for hours if the product is not washed off. Chronic: repeated skin contact with the use solution may dry or irritate the skin.
Acute toxicity	Not classified
Acute toxicity estimates (ATE)	Oral: greater than 10,000 mg/kg. Dermal: greater than 30,000 mg/kg. Inhalation: no data available for the product; not classified.
Skin corrosion/irritation	Category 1. Causes severe skin burns. Classified under 29 CFR 1910.1200 Appendix A, Table A.2.4: the product contains more than 1% of a strong base and is strongly alkaline (measured pH 12.4 to 12.6,

	calculated above 13).
Serious eye damage/eye irritation	Category 1. Causes serious eye damage, which may be permanent.
Respiratory or skin sensitization	Not classified. A minor ingredient contains a skin sensitizer, below the concentration that would classify the product; persons already sensitized may react. Respiratory sensitization: not classified.
Germ cell mutagenicity	Not classified. No ingredient present at 0.1% or more is classified as a germ cell mutagen.
Carcinogenicity	Not classified. No ingredient present at 0.1% or more is listed as a carcinogen or potential carcinogen by NTP, IARC or OSHA.
Reproductive toxicity	Not classified
Specific target organ toxicity, single exposure	Not classified. The alkaline silicate is a respiratory irritant, below the concentration that would classify the product. Mist of the product is corrosive to the respiratory tract (see Section 2).
Specific target organ toxicity, repeated exposure	Not classified
Aspiration hazard	Not classified
Interactive effects	None known

Component data: Sodium hydroxide

LD50 oral, rabbit	325 mg/kg	**LD50 dermal, rabbit**	1,350 mg/kg
Skin corrosion	Corrosive	**Skin sensitization**	Not sensitizing

Component data: Builder

LD50 oral, rat	Greater than 2,000 mg/kg (OECD 401)	**LD50 dermal, rabbit**	Greater than 4,640 mg/kg

Component data: Alkaline salt

LD50 oral, rat	2,800 mg/kg	**LD50 dermal, rabbit**	Greater than 2,000 mg/kg

Component data: Hydrotrope

LD50 oral, rat	7,000 mg/kg	**LD50 dermal, rabbit**	Greater than 2,000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Component data: Sodium hydroxide

LC50 fish, 96 h	125 mg/L (Gambusia affinis)	**LC50 daphnia, 48 h**	40 mg/L (Ceriodaphnia dubia)

Component data: Hydrotrope

LC50 fish, 96 h	Greater than 1,000 mg/L	**EC50 daphnia, 48 h**	1,000 mg/L or greater
EC50 algae, 72 h	230 mg/L	**Biodegradability**	Readily biodegradable

Persistence, bioaccumulation, mobility and other effects

Ecotoxicity	No data available for the product. The ingredients have low aquatic toxicity at the concentrations in the product, but the high pH of the undiluted product harms aquatic life.
Persistence and degradability	No data available for the product. The hydrotrope is readily biodegradable. The inorganic ingredients do not biodegrade; the base is neutralized in natural waters.
Bioaccumulative potential	No data available for the product. The ingredients are not expected to bioaccumulate.
Mobility in soil	The product is miscible with water.
Other adverse effects	The undiluted product is strongly alkaline and can raise the pH of receiving waters. The builder is a phosphate and can contribute to nutrient enrichment of surface water. Do not release undiluted product to surface water, sewers or storm drains.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods	Dispose of contents and container at a permitted hazardous waste facility in accordance with local, state and federal regulations. Do not discharge to storm drains, sewers or waterways without authorization. Do not mix the waste with acids.
RCRA waste code	D002 (corrosive waste) when discarded, because the pH is 12.5 or higher (40 CFR 261.22). Not ignitable (D001): the product is a water-based solution with no flash point.
Contaminated packaging	Empty containers retain residue. Rinse them with water, add the rinse water to the use solution, and dispose of the rinsed containers in accordance with local regulations. Do not reuse them.

SECTION 14. TRANSPORT INFORMATION

	DOT (US ground)	IMDG (sea)	IATA (air)
UN number	UN1824	UN1824	UN1824
UN proper shipping name	Sodium hydroxide solution	Sodium hydroxide solution	Sodium hydroxide solution
Transport hazard class	8	8	8
Packing group	III	III	III
Hazard labels	Corrosive	Corrosive	Corrosive
Marine pollutant	No	No	Not applicable

Emergency response guide ERG Guide 154

Transport in bulk according to MARPOL Annex II Not applicable (shipped in packages, not in ship tanks)

4 x 1 US gal case (D11030) Each 3.785 L jug is within the 5 L inner packaging limit for a Class 8, packing group III limited quantity (49 CFR 173.154(b)). By highway or rail the case may ship as a limited quantity: strong outer packaging of 30 kg (66 lb) gross or less, limited quantity mark and orientation arrows; no Corrosive label, placard or shipping paper. Otherwise ship fully regulated in UN specification packaging for packing group III liquids (49 CFR 173.203), with the UN1824 and proper shipping name marks, Corrosive label, orientation arrows, shipping paper and emergency response information. About 36 lb (16.4 kg) of product per case.

5 US gal pail (D11089) The 18.93 L pail is above the 5 L limited quantity limit and ships fully regulated: a UN specification pail rated for packing group III liquids (49 CFR 173.203), marked UN1824 with the proper shipping name, with the Corrosive label, shipping paper and emergency response information. About 45 lb (20.5 kg) of product per pail.

Special precautions for user Keep away from acids during transport. Keep containers upright and closed.

SECTION 15. REGULATORY INFORMATION

OSHA hazard communication This product is a hazardous chemical under 29 CFR 1910.1200.

TSCA inventory The ingredients listed in Section 3 are listed as active on the TSCA Inventory.

SARA 302 extremely hazardous substances Not listed

SARA 311/312 hazard categories Corrosive to metal; skin corrosion or irritation; serious eye damage or eye irritation.

SARA 313 toxic chemicals No ingredient listed in Section 3 is subject to the supplier notification requirements of 40 CFR 372.

CERCLA reportable quantity Sodium hydroxide (Section 3) is a CERCLA hazardous substance with a reportable quantity (RQ) of 1,000 lb. Based on the upper limit of its Section 3 concentration range, evaluate releases of about 20,000 lb (about 2,200 US gal) or more of the product for reporting to the National Response Center (40 CFR 302.6).

Clean Water Act Sodium hydroxide is a section 311 hazardous substance (40 CFR 116.4).

New Jersey right-to-know Contains a substance on the New Jersey right-to-know hazardous substance list.

Pennsylvania right-to-know Contains a substance on the Pennsylvania right-to-know hazardous substance list.

Massachusetts right-to-know Contains a substance on the Massachusetts right-to-know list.

California Proposition 65 No ingredient listed in Section 3 is on the Proposition 65 list.

SECTION 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of preparation or last revision

Issue date 2026-10-26 **Version** 1

Date of first issue 2026-10-26 **Supersedes** Earlier SDS, unnumbered

Hazard ratings

NFPA 704



HMIS

Health	3
Flammability	0
Physical hazard	0

NFPA 704 ratings run from 0 (minimal hazard) to 4 (severe hazard). HMIS rating scale: 0 minimal, 1 slight, 2 moderate, 3 serious, 4 severe. Personal protection: see Section 8.

NFPA 704 and HMIS ratings are provided for reference only and are not part of the GHS classification.

References

1. OSHA Hazard Communication Standard, 29 CFR 1910.1200, Appendices A to D, as amended May 20, 2024.
2. US DOT Hazardous Materials Regulations, 49 CFR 171 to 180.

Disclaimer

The information in this Safety Data Sheet is believed to be accurate as of the issue date and is given in good faith as a guide to safe handling, use, storage, transport and disposal. It is not a product specification and no warranty, express or implied, is made. Users must determine the suitability of the product for their own purposes and comply with all applicable laws and regulations. Gascó Industrial Corp. accepts no liability for loss or damage resulting from the use of this information or of the product.

Document control (Section 16, continued)

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Revision history

Version	Date	Summary of changes
1	2026-10-26	First issue.

Review and approval

Role	Name	Title	Signature	Date
Prepared by	Quality Assurance	Gascó Industrial Corp.		
Reviewed by	Dan N. Bigman-Montalvo	CEO, Gascó Industrial Corp.		
Approved by	Dan N. Bigman-Montalvo	CEO, Gascó Industrial Corp.		

Prepared in accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200.

End of Safety Data Sheet | Page 7 of 7