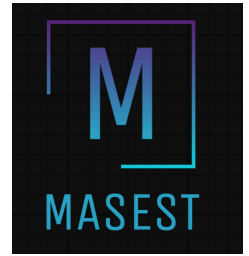


VertKleen Descaler

ACID-FREE, NON-CAUSTIC, NON-REGULATED LINE CLEANER AND DESCALER



- 100% Synthetic Acid
- Non-Caustic
- Dissolves Calcium
- U.S. Navy Approved
- U.S. Coast Guard Approved
- Descales Heat Exchangers
- Cleans Cooling Towers
- Cleans Boilers
- Removes Milk/Beer Stone
- Neutralizes with Water
- No Disposal Requirements
- Non-D.O.T. Regulated

VertKleen Descaler is the most aggressive line cleaner and descaler ever developed. Independent tests confirm that our patented Syntech, the world's only synthetic acid, dissolves nearly 15% more calcium than Muriatic (hydrochloric) acid. Still, all that potency comes with a triple-zero Hazardous Material Index Score, which makes our line cleaner safe for your equipment, safe for your personnel and safe to store anywhere you wish.

VertKleen Descaler breaks down calcium, lime, scale, milk stone, beer stone and other deposits which, until now, required the use of corrosive and dangerous acids or caustics. What's more, because Syntech is not an acid, we can combine it with surfactants, detergents and other ingredients to eliminate secondary and tertiary steps in your cleaning process.

The potency of VertKleen Descaler combined, with our safety profile, makes it the natural choice of the U.S. Navy and U.S. Coast Guard. In fact, VertKleen Descaler is the only non-acid cleaner that meets current Navy requirements for the cleaning of heat exchangers aboard their ships.

VertKleen Descaler can also be used to safely descale cooling towers, heating coils, boilers and any equipment that tends to build up calcium such as in food preparation plants, hospitals, even nuclear power facilities. As VertKleen Descaler neutralizes instantly with fresh water, we remove the time and material costs associated with additional steps needed with acid-based products. VertKleen Descaler is biodegradable per OECD 301D and removes no trace metals from the system, making it legal to dispose of the treated water directly into the sanitary system. VertKleen Descaler is 100% non-corrosive and non-regulated by the D.O.T., and is non-mutagenic to marine life. The formula and its ingredients meet or exceed the EPA's Safer Choice program requirements for both the safety of the environment and the user.



Technical Data

BIODEGRADABLE: Yes/100%	FLAMMABILITY: Non-Flammable
FORM: Liquid	BOILING POINT: 210 F
ODOR: Mild Soapy Odor	SOLUBILITY IN WATER: 100%
COLD STABILITY: 08 F	VOCs: None
DETERGENCY: Excellent	VOLATILE BY VOLUME: N/A
PHOSPHATES: None	CARCINOGENS: None
WETTING ABILITY: Excellent	SHELF LIFE: 2 Year

Dissolving Properties

Calcium Oxide Dissolving Properties HCl (Muriatic)	8.9
VertKleen Descaler	8.1
Urea HCL	7.2
Urea Sulfuric	6.1
Phosphoric	0.9
Citric	0.0
Lactic	0.2
Acetic	0.1
Glycolic	0.2
Oxalic	0.0
Malic	0.4

Test Conditions

200 grams of 5% active solution
1 Calcium Oxide Cube
3 Minutes @ 70° F

DOT STATEMENT

Non-D.O.T. Regulated/Non-D.O.T. Hazardous
EXEMPT as per 49 CFR 173.154(d) (2) <6.25 mmpy

Dilution Specification

Please refer to the product label.

Toxicity Studies

Toxicity Limits: Test Procedure OECD 202, 48 hr. LC 50 and LD 50 (rat oral: NON-TOXIC)

Mutagenicity Limits: OECD Guidelines Sec. 471 Chemicals: NON-MUTAGENIC

Dermal Irritation & Corrosion

A modified Draize method was used as described in OECD Guidelines for the Testing of Chemicals Sec. 404 and complies with the requirements of OECD Principles of GLP, Annex revised as of July 1992.

VertKleen Descaler is classified as a "Non-Skin Irritant".

Biodegradation & Aquatic Safety

Test Procedure: Hach Reactor Digestion method for Waste Water and Sea Water. Hach Reactor Digestion Method is a semi-micro adaptation of the Standard Methods.

VertKleen Descaler is 100% Biodegradable.

Classifications & Approvals

D.O.T., IMO, IATA, IMDG - Non-Regulated

TDG - Non-Regulated to and through Canada

SARA 313 311/312 - This product does not contain any ingredients that are subject to the reporting requirements.

California Prop 65 - This product does not contain any ingredients known to the state of California to cause cancer, birth defects or any other reproductive harm.

FDA - Recognized as Safe (GRAS)

USDA Authorization

NSF- A1, A2, A4, A8, C3

NAVSEA

NSN-6850015428898 / 5 gallon pail

NSN-68500154288904 / 55 gallon drum

NSN-68500154288912 / 275 gallon tote

U.S. Coast Guard

NOAA

HRSD for direct disposal into VA sewer system

Additional Studies & Results: When tested, VertKleen Descaler showed no potential for the generation of Carbon Dioxide under NIOSH 7903 OSHA & ACGIH testing protocols governing workplace environments.