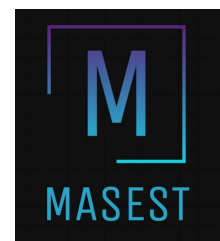


VertKleenSAR[®]

LOW pH REPLACEMENT FOR SULFURIC ACID



- Zero VOCs
- Non-Corrosive
- Acid Free
- Non-Fuming
- Non-D.O.T. Regulated
- 100% Biodegradable
- Safe on Eyes and Skin
- Lowers pH in any Fluid
- Near Zero Exothermic Reaction w/ Dilution

Until now, various industries has been forced to use dangerous acids, caustics and solvents to dissolve calcium carbonate, remove scale and paraffins and adjust pH.

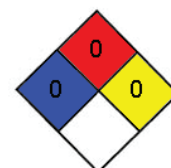
The VertKleen line of products employs the most advanced developments in green technologies to replace those dangerous chemicals with safe yet potent replacements .

VertKleen SAR allows you to replace highly reactive sulfuric acid solutions when the focus is more on pH control and less on scale buildup and paraffin removal. VertKleen SAR titrates equally to 40% sulfuric acid without the corrosive and volatile traits associated with sulfuric. In fact, when mixed with water, SAR has almost no exothermic response. Still, all that potency comes with a triple-zero HMIS score, which makes SAR safe on skin, eyes, equipment and safe to store.

The VertKleen line offers a wide range of products that have been proven effective through years of testing and use to replace dangerous acids, caustics and solvents. What's more, these synthetic solutions have been formulated with ingredients and technology known to the U.S. EPA and proven to exceed requirements for direct release. VertKleen SAR is made from 100% Cleangredients.

VertKleen products are available in totes and bulk and have a one year shelf life. What's more, like all VertKleen products, VertKleen SAR can be shipped common carrier. No special gloves or PPE are needed for handling SAR and it can be stored without secondary containment.

Ask your local VertKleen dealer for information on our complete line of safe replacements for caustics, solvents, acids, bleach and chlorine.



Technical Data

BIODEGRADABLE: Yes/100%	FLAMMABILITY: Non-Flammable
FORM: Liquid	BOILING POINT: 212° F
ODOR: Mild	SOLUBILITY IN WATER: 100%
COLD STABILITY: -26° F	VOCs: None
DETERGENCY: Moderate	VOLATILE BY VOLUME: N/A
PHOSPHATES: None	CARCINOGENS: None
WETTING ABILITY: Excellent	SHELF LIFE: 2 Year

Common Uses

VertKleen SAR will lower the pH in any fluid without the dangers found in sulfuric and buffered sulfuric acids so common in oil field operations.

Add SAR as needed to lower the pH of any liquid. SAR titrates safely without the thermal reaction common to sulfuric acid.

Storage and Handling

VertKleen SAR has a shelf life of more than one year. Product is freeze/thaw stable. Keep container closed when not in use. Safety glasses are suggested when handling this product. No special gloves or protective equipment are required. Due to the product's low pH, aluminum piping and fittings should be avoided. Consult your authorized VertKleen representative for tank, piping, valve, hose coupling and fitting recommendations.

VertKleen SAR is typically sold in 275 gallon totes but can be packaged in smaller containers as well as bulk delivery. Rinse empty container and discard as per federal, state and local regulations.

DOT STATEMENT

Non-D.O.T. Regulated/Non-D.O.T. Hazardous
EXEMPT as per 49 CFR 173.154(d) (1) <6.25 mmpy

D. O. T. classifies a material to be corrosive and hazardous if it has a corrosion rate that exceeds 6.25 mmpy on SAE C1020 carbon steel.

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 SAR is classified as a "Very Mild 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 SAR is 100% Biodegradable.

Classifications & Approvals

D.O.T - 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 - Approved as Safe (GRAS)

Clean Air Act

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA

Kosher Pareve

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