

SERVICE BULLETIN



SB-18-014

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Technical Information: Oakite 33

Oakite 33 is a liquid acidic compound designed for removing light grease, oils, shop dirt, flux, rust, oxides and heat scale. Oakite is also used for cleaning stainless steel and for preparing metals for painting.

Please see the attached Technical Information bulletin for Oakite 33

Please explore Chemetall's [website](#) for more information

Any questions regarding the content of the document may be directed to: Chemetall at (800) 526-4473.

Any other questions regarding this service bulletin should be directed to Utility's Field Service Department at 800-423-6591.

Field Service Department
UTILITY TRAILER MANUFACTURING COMPANY

Attached: Technical Information Oakite 33 (3 pages)

Utility hasn't independently evaluated the information contained in the technical bulletin; it is making the bulletin available as a convenience and for information purposes. You are encouraged to contact Chemetall at (800) 526-4473 if you have any questions concerning the content of the document, or how these issues affect trailers you are servicing.

Oakite[®] 33

Acidic compound for cleaning, removing oxides and preparing metals for painting.

PRIMARY APPLICATION

Oakite 33 is a liquid acidic compound designed for removing light grease, oils, shop dirt, flux, rust, oxides and heat scale and for preparing metals for painting. It is also used for cleaning and conditioning aluminum prior to surface conversion processing. Another application, recommended by stainless steel manufacturers, is the use of Oakite 33 for cleaning stainless steel to remove dirt and embedded soils in the metal.

Oakite 33 meets the following Federal and Military specifications: TT-C-490, Method VI, and MIL-C10578, Type 1

CHEMICAL CHARACTERISTICS

chemical composition.....	phosphoric acid, solvents and surfactants
physical form	liquid
color.....	tan
odor	mild
specific gravity (approx).....	1.345 at 20°C (68°F)
bulk density	1345 g/l (11.2lb./gal)
viscosity	34 to 40 cps at 20°C (68°F) Brookfield Spindle 1, 60 rpm
flash point (undiluted)	none
hygroscopic tendency	slight
foaming tendency	moderate when circulated; severe when sprayed
recommended diluent	water
maximum solubility	complete
behavior in hard water	solubilizes hard water salts
rinsability	good with hot water; fair with cold water
biodegradable surfactants	yes
phosphate-free	no
normal working concentrations	2 to 50% by volume
normal working temperatures	27° to 60°C (80° to 140°F)
pH at working concentrations	under 2.0 at 21°C (70°F)
effect of prolonged boiling	loss of solvent

effect of working solutions on metals rate of metal loss from a 24-hour immersion in Oakite 33 at 5% by volume, 29°C (120°F), projected for one year, is as follows:

metal (alloy) (1010)	steel	mm/yr	in/yr
		3.12	0.123
stainless steel (304)		0.00	0.000
stainless steel (316)		0.00	0.000
stainless steel (403)		0.00	0.000
aluminum (3003)		12.14	0.478
galvanized steel		6.07	0.239
copper		0.10	0.004
brass		0.08	0.003
zinc		26.06	1.026
magnesium		25.25	0.994

APPLICATION PROCEDURE

By tank immersion - use at 5% to 25% by volume at 27° to 60°C (80° to 140°F) followed by rinsing and drying.

For Wipe-on-methods - use at 10% to 50% by volume at room temperature. Apply with rags or brushes, allow to soak for 2 to 20 minutes, rinse and wipe dry

Solution Control: Concentrations are titrated using Gardotest Procedure 128. Sample Size: 1.0 mls
Factor: 6.5

NOTES ON USE (See Material Safety Data Sheet)

Tanks for Oakite 33 may be made of ceramics, acid-proof brick, Karbate or stainless steel, 304 ELC, 316 ELC or 347. Do not use lead or Monel equipment or lining of rubber or the "brush-on" protective types. Heating coils should be of impervious carbon or graphite, such as Karbate Nos. 12 or 22 and Norcodal, or stainless steel 304 ELC, 316 ELC or 347. Washing machines should also be acid resistant. Oakite 33 will gradually attack ordinary steel tanks, washing machines or piping.

In food plants, the use of Oakite 33 is limited to maintenance work and operations other than in food processing areas.

Dilute solutions of Oakite 33 may tend to become turbid when heated, but will regain clarity upon cooling. The turbidity does not in any way alter the working qualities of the product.

Avoid contact or mixing with chlorine-releasing materials.

Safety and Handling Precautions: Oakite 33 is a highly acidic material containing phosphoric acid and a solvent. Direct contact causes burns of eyes and may cause burns of skin. Harmful if swallowed. It may be harmful if inhaled. Avoid contact with eyes, skin and clothing. Wear safety goggles, rubber gloves and other suitable protective clothing. Wash thoroughly after handling. Avoid breathing mist or vapor. Use with adequate ventilation Do not take internally.

First Aid in Case of Contact: Immediately flush skin or eyes with plenty of water for at least 15 minutes; for **eyes**, get medical attention Remove contaminated clothing and shoes and wash before reuse. If **inhaled**, remove from exposure. If **swallowed**, wash out mouth thoroughly with water. Drink plenty of water. Contact a physician immediately. Do not induce vomiting.

KEEP OUT OF REACH OF CHILDREN

DISPOSAL

Dispose of according to all federal, state and local regulations

SHIPMENT

May be shipped by any common carrier. Freight classification is "Compound Cleaning, Liquid, (phosphoric acid) - 8, NA 1760." Product Code No: 0330.

STORAGE

Keep from freezing. While freezing will not affect Oakite 33, for convenience of use it is advisable to store indoors at moderate temperatures out of direct sunlight and away from heat. Keep container closed when not in use. Before opening drum, loosen bung slowly to relieve any pressure build-up

effect of high temperature storage slight darkening
effect of low temperature storage slight darkening
effect of aging none

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