

Oakite[®] DZL

A liquid alkaline detergent for heavy-duty maintenance cleaning.

PRIMARY APPLICATION

Oakite DZL, a heavy-duty alkaline detergent, removes dense accumulations of road grime, oil, caked-on grease and other tenacious soils. It is versatile enough to be used for other cleaning jobs on railroads and in other industries where tough soils must be removed by brushing, steam gun, high-pressure spray, or other mechanized means.

Liquid Oakite DZL is miscible in water at all proportions, so solutions are easy to prepare. There are no solids to clog coils or spray nozzles. Rinsability is good in hot or cold water. Used at proper dilutions, Oakite DZL is economical as well as fast-acting and efficient.

CHEMICAL CHARACTERISTICS

| | |
|---|--|
| chemical composition | blend of caustic and other alkaline salts, synthetic surfactants and solvents |
| physical form | as received: yellow to red liquid as used: colorless solution |
| odor | musty |
| specific gravity | 1.248 at 20°C (68°F) |
| bulk density | 1248 g/l (10.4 lb/gal) |
| viscosity | 22 cps, Brookfield Spindle 2, 60 rpm |
| flash point | none |
| foaming tendency | moderate |
| recommended diluent | water |
| maximum solubility | complete |
| behavior in hard water | sequesters |
| rinsability | good with hot or cold water |
| biodegradable surfactants | yes |
| phosphate-free | yes |
| normal operating temperatures | ambient - 21° to 60°C (70° to 140°F) |
| normal working concentrations | See Application Procedure on other side. |
| pH at working concentrations | 12.9 to 13.6 at 21°C (70°F) |
| effect of prolonged boiling | possible loss of solvent - recommended range 21° to 60°C (70° to 140°F) |
| effect of working solutions on metals | rate of metal loss from 24-hour immersion in Oakite DZL, 6.25% (1 part to 15 parts water) solution, 60°C (140°F), projected for one year, is as follows: |

| metal (alloy) | mm/yr | in/yr |
|------------------------|------------------|--------|
| stainless steel (316L) | 0.00 | 0.000 |
| stainless steel (403) | 0.00 | 0.000 |
| steel (1010) | 0.00 | 0.000 |
| galvanized steel | 1.42 | 0.056 |
| zinc | 1.62 (discolors) | 0.064 |
| titanium | 0.00 | 0.000 |
| magnesium | 0.00 (discolors) | 0.000 |
| aluminum (1100) | attack | attack |
| copper | 0.15 (stains) | 0.006 |
| brass | 0.23 (stains) | 0.009 |

APPLICATION PROCEDURE

Use 1 part Oakite DZL with 15 to 20 parts water. Apply through a high-pressure spray unit. Allow to soak for a short time. Reapply solution if necessary. Follow by a high-pressure hot or cold water rinse. Heated solutions will work faster than cold ones, allowing further dilution.

To Spray Diesel Exteriors: Use 1 part Oakite DZL to 50 parts water, applied by spray. Test this dilute solution first on painted surfaces to make sure solution does not attack or soften the paint. Do not use on aluminum, zinc or brass.

For Steam Cleaning: Cut concentration to 1 part DZL to 100 parts water.

For Floors: Use in a scrubbing machine at 1 to 2 parts DZL to 100 parts water.

Solution Control: Concentration may be titrated using Gardotest Procedure 56. For free and total alkali use Gardotest Procedure 123.

For concentrations use Gardotest Procedure 56.

Sample Size: 25.0 mls Factor: 1.58

For free and total alkali use Gardotest Procedure 123. (See Procedure)

EQUIPMENT

The Chemetall Oakite Chemical Metering Pump can be used to automatically maintain the make up chemical requirement of this product. If predilution is required, the Chemetall Oakite water driven Proportioners can be used to automatically feed the premixed solution of this product to the process tank. Please contact the Chemetall Oakite Process Equipment and Engineering Department for specific recommendations.

NOTES ON USE (See Material Safety Data Sheet)

When preparing new solutions or adding to existing ones, slowly add to surface of solution while stirring to avoid spattering. Do not add large amounts of product to solution at any one time. Do not add to hot water or hot solution warmer than 43° to 49°C (110° to 120°F).

Do not use on food contact surfaces.

Safety and Handling Precautions: Oakite DZL is a heavy-duty alkaline cleaner containing sodium hydroxide. Direct contact causes burns of eyes and skin. Harmful if swallowed or inhaled. Avoid contact with eyes, skin and clothing. Wear rubber gloves and safety goggles and other suitable protective clothing when handling. Wash thoroughly after handling. Avoid breathing mist. Use with adequate ventilation. Do not take internally.

First Aid in Case of Contact: Immediately flush **eyes** or **skin** with plenty of water for at least 15 minutes. Get medical attention. For **skin**, remove contaminated clothing and shoes. Wash them before reuse. If **swallowed**, wash out mouth thoroughly with water. Give several glasses of water to drink. Contact a physician.

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 "Cleaning Compound Liquid, 8, (Sodium Hydroxide, Solution), NA 1760 III". Product Code No: 4060.

STORAGE

Suitable for general indoor storage. Keep container closed when not in use. Keep from freezing.

effect of high temperature storage none
effect of low temperature storage becomes clear upon freezing
at -6.6°C (20°F)
effect of prolonged storage may darken

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Oakite**



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Corporate Headquarters and Eastern Branch (800) 526-4473 • Central Branch (Midwest) (877) 941-3800
Western Branch (800) 331-1197 • Oakite Canada Limited (800) 668-4318
Chemetall Mexicana 011 52 55 5656 1490 • Chemetall do Brasil Ltda. (5511) 4066 8800
Website: www.oakite.com • E-mail: oakite.products@chemetall.com • Shop online at www.oakitestore.com

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