

Versitile NBT-L

Versitile NBT-L is a concentrated clear phosphate free alkaline blend of detergent builders and surfactants and designed for use in most types of mass finishing such as vibratory, centrifugal disc and open/closed tumbling applications. Although not designed as a “degreaser”, it will help in emulsifying light oils that may be present on parts during mass finishing. Particularly effective at removal of light rust from ferrous parts and will aid in preventing rust if solution remains on processed parts. Can be used for finishing of steel, cast iron, copper and brass. Not recommended for use with aluminum and/or zinc parts. Suitable for use with ceramic or synthetic (plastic resin) media or part-on-part in a tumbling application. Not recommended for use with steel/stainless steel finishing media.

Features & Benefits

Low concentration use in conventional vibratory, closed and open tumbling as well as centrifugal disc finishing applications.	Will remove surface oxide(s) to produce clean metal surfaces while keeping mass finishing media clean
Safe and effective for use on most all metals except aluminum and zinc	Particularly well suited for ferrous metals along with brass and copper alloys

Physical Data

Appearance	Amber clear liquid
Odor	Faint
Compatibility	Avoid mixture with acids
Foaming tendency	Moderate
pH (neat)	13.0
pH - 1.5%	11.3

Operating Conditions

Conventional Vibratory, Centrifugal Disc Finishing (with media)

	Range	Optimum
Concentration	1.0- 2.0 fl.oz./gallon (7.8 – 15.6 ml./L)	1.5 fl.oz./gallon (11.7 ml./L)
Temperature	Cold - Ambient	Cold
Time	As required	As required
Flow Rate	1.0-1.5 gals./hr./cu. Ft.	1.5 gals./hr./cu. Ft.

Open Closed Tumbling (with media or part-on-part)

	Range	Optimum
Concentration	2.0- 5.0 oz./gallon (15.6 – 39.0 ml./L)	3.5 oz./gallon (27.3 ml./L)
Temperature	Cold - Ambient	Ambient
Time	As required	As required

Solution Make-Up:

In general, use of a metering pump to “dose” incoming water line(s) to the vibratory unit or centrifugal disc unit. See the manufacturer’s instructions for setting the pump to deliver the proper quantity of Versitile NBT-L based on the water flow rate to the process unit. It is important that the drain holes at the bottom of the vibratory unit are free flowing and remain free of any lodged media or part chips, etc. to minimize foam build up during processing. For open/closed tumbling, volume of product based on fixed water volume in the vessel.

Product Profile

Caustic (potash)	Yes
Phosphate	No
Silicate	No
Complexors	Yes
Chelates (EDTA, NTA types)	Yes



Control of concentration is accomplished in a vibratory application by use of a chemical metering pump that “doses” an incoming water line set at proper water flow rate. The ratio of chemistry to water is based on above recommendations.

Recommended equipment – Conventional bowl/tub vibratory units with polyurethane lining. Open/closed tumbler – recommend stainless steel or polyethylene barrels (unheated process)

Waste Disposal

Versitile NBT-L and its working solutions are alkaline. At minimum, waste stream must be neutralized to meet local POTW or municipal effluent discharge requirements. Sludges and oils should be separated out before discharge. Spent Versitile NBT-L solutions may contain dissolved metals from the vibratory tumbling process. Therefore, additional treatment of the solution may be required to meet discharge requirements.

Caution

Versitile NBT-L is moderately alkaline. Consult Versitile NBT-L SDS sheet before handling this product. It should be handled with all the safety precautions associated with alkalis.

Hazard Classification

DOT Hazard Class	8 CORROSIVE
DOT Shipping Name	CORROSIVE LIQUID,NOS(POTASSIUM HYDROXIDE)
UN Number	1760
Packaging Group	II
ERG	154

WARRANTY: THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.



563 South Leonard Street, Waterbury, CT 06708 • HubbardHall.com • 800-648-3412

Product Bulletin

Product Name: Versitile NBT-L
Product Code: 2101102
Revision Date: March 7, 2025

Our People. Your Problem Solvers.

For more information on this process,
please call us at 203.756.5521 or email: techservice@hubbardhall.com

Hubbard-Hall holds certifications for **ISO 9001:2015**, Responsible Distribution, as accredited by the **ACD** (Alliance for Chemical Distributors) and as a **Women-Owned Small Business**, as well as maintaining an association with **Omni-Chem**¹³⁶.