

# Deep Clean™ Multi

## Application Sheet

Deep Clean Multi offers dual cleaning power unequalled by chemistry alone. The patent-pending formulation in Deep Clean Multi instantly cleans the floor by removing surface soils, while the beneficial microorganisms, including a patented microorganism, penetrate deep into the pores of surfaces to degrade a wide range of embedded residual soils. These beneficial microorganisms break down even the most resistant grease, keeping the floor truly deep-clean and odor free.

### Benefits

#### Effective, long-lasting cleaning and odor control

- Deep-cleans floors immediately by removing the grease and grime that collect on the floor surface
- Enhances long-lasting cleaning effects by degrading residual organics for an extended time after cleaning is complete
- Helps provide in-depth odor control by breaking down odorous molecules and odor-causing organics
- Eliminates the need for rinsing after mopping

#### Superior performance

- Independent laboratory confirms that Deep Clean Multi has superior performance compared to two leading brands
- Superior performance compared to leading competitor chemical and microbial-based products

#### Advanced cleaning technology

- Patented microbial technology and patent-pending formulation technology for optimal and long-lasting performance in floor cleaning

#### Certifications

- EcoLogo™-certified formulation available
- Certified within the NSF Nonfoods Compounds Registration Program

Product	Application	Specifications
Deep Clean™ Multi	Hard surface cleaner	<ul style="list-style-type: none"> <li>• Liquid</li> <li>• Fully formulated</li> <li>• 5X concentrate</li> </ul>

## Performance

Deep Clean Multi provides superior immediate cleaning and removal of the grease and grime that collects on hard surfaces compared to leading competitor floor cleaners. Third-party laboratory tests found Deep Clean Multi removed surface soils and stains such as coffee, cocoa, orange juice, and grape juice better than two leading brands.

Figure 1 demonstrates the capability of Deep Clean Multi to immediately spread over and penetrate the grease to remove soil particulates more effectively than the competitor brand. In this test, oil and carbon black were applied to white porcelain tiles. Deep Clean Multi and the competitor product were applied to the center of the soil mixture. Each product was rated by the amount of time required to spread over the soil and how effectively it pushed and picked up the oil and carbon black from the surface.

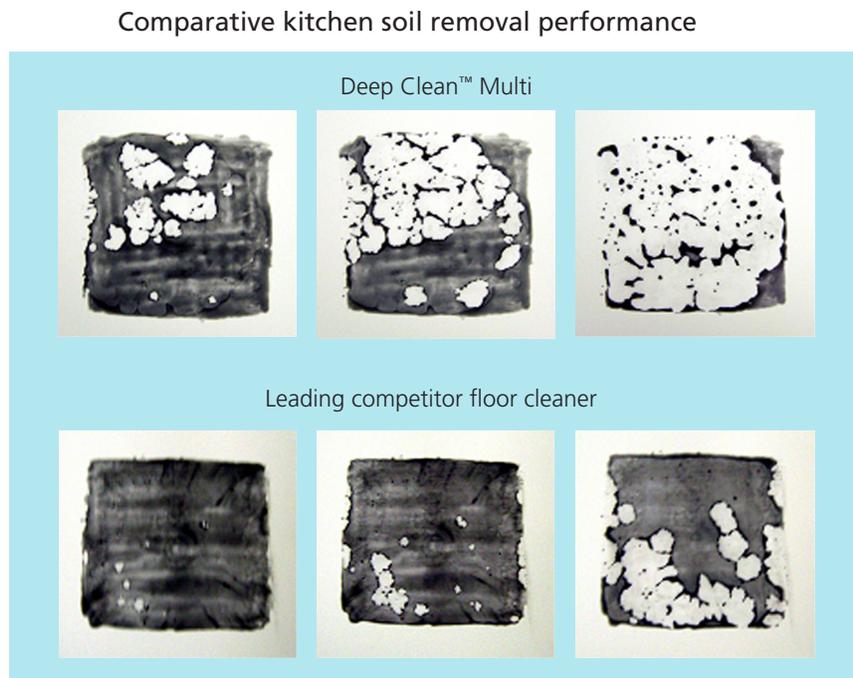
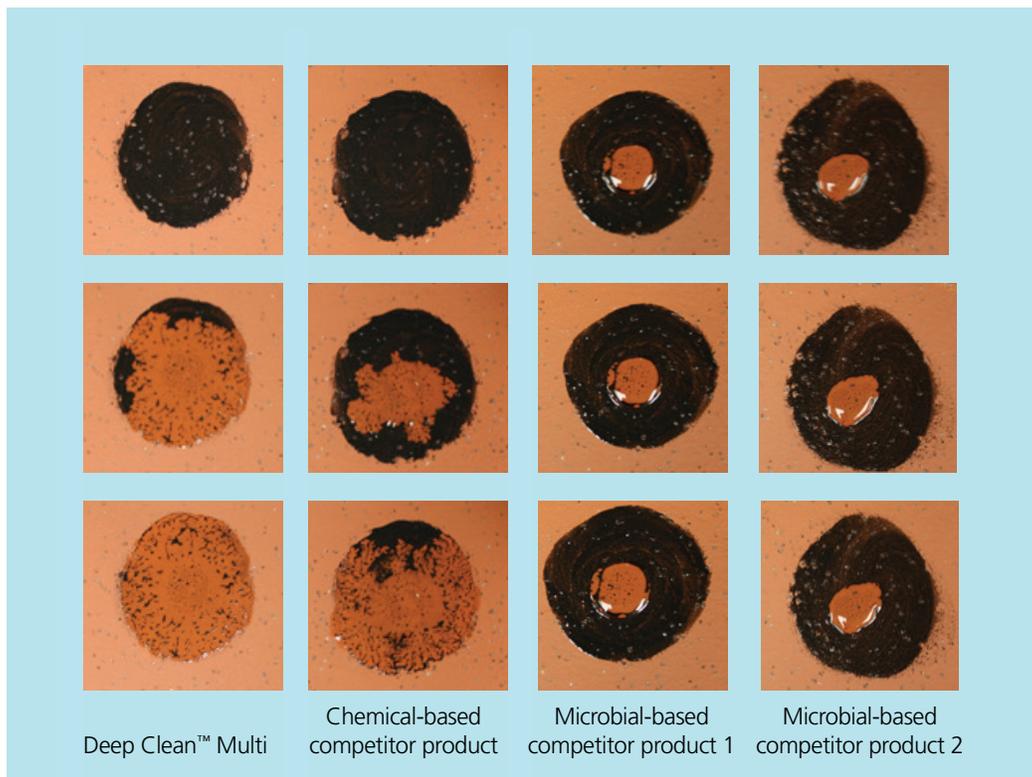


Fig. 1. Deep Clean™ Multi immediately (within 30 seconds) spreads over soil to penetrate grease and remove soil particulates more effectively than the competitor brand.

Deep Clean Multi shows superior performance to a caustic, chemical-based competitor product and two microbial-based competitor products on the same oil and carbon black soil (Fig. 2). In this test, an oil and carbon black mixture was rubbed onto textured tiles. Deep Clean Multi and the competitor products were applied to the center of the soil mixture. Each product was rated by the amount of time required to spread over the soil and how effectively it pushed and picked up the oil and carbon black from the surface. Deep Clean Multi demonstrates equal performance to the chemistry-only, caustic product, which, unlike Deep Clean Multi, requires rinsing after use.

#### Comparative chemical and microbial product cleaning performance



**Fig. 2.** Deep Clean™ Multi (left) exhibits superior cleaning compared to a leading caustic chemical-based competitor, and two microbial-based competitors on an oil and carbon black stain on textured tile. Elapsed time is < 35 seconds.

The beneficial microorganisms in Deep Clean Multi continue to degrade residual organics for an extended time after cleaning is complete. This is shown in Figure 3 as the beneficial microorganisms in Deep Clean Multi demonstrate a respirometric activity when inoculated in organic medium simulating kitchen soil. Metabolic activity is still observed after eight days when organics are present. An increase in the oxygen uptake demonstrates that the microorganisms are metabolically active and degrading organics.

Microbial activity on kitchen soil

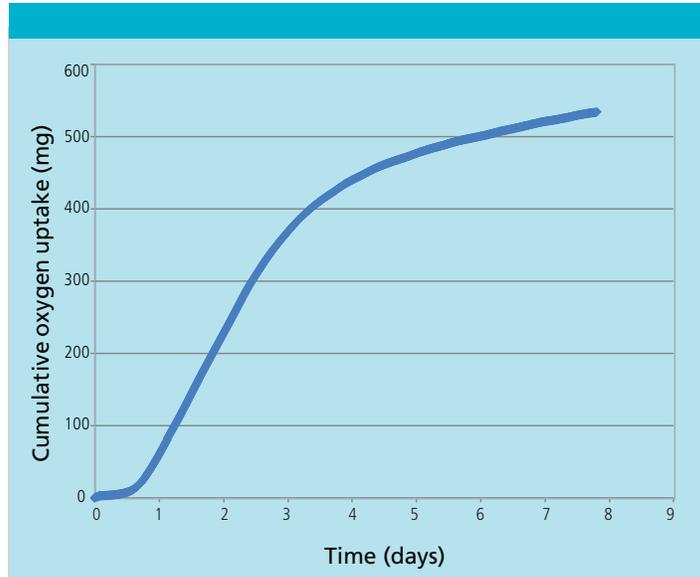
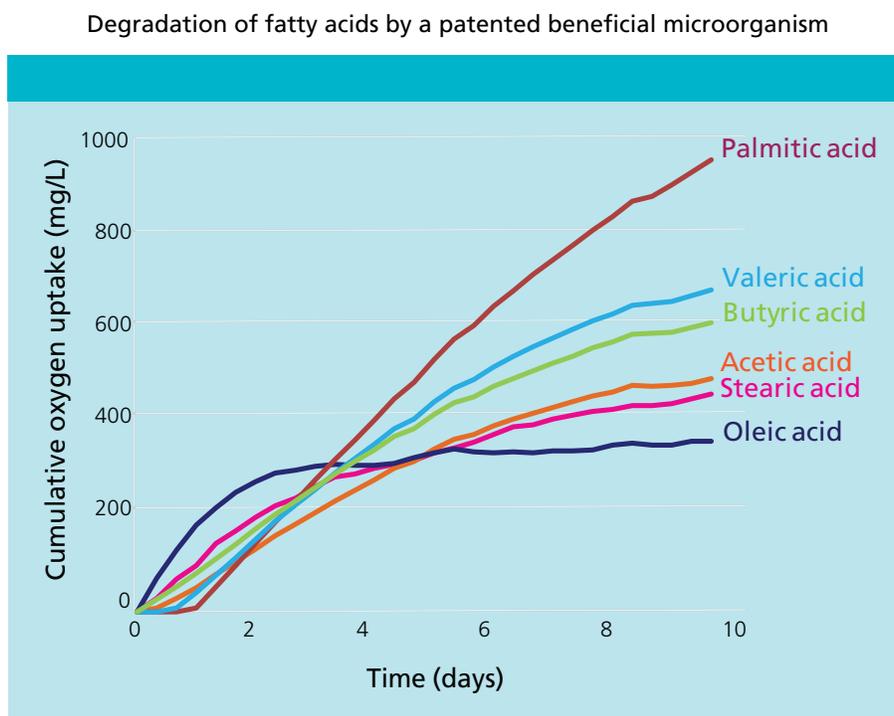


Fig. 3. The long-lasting, continuous degradation (8+ days) of kitchen soil and grease is demonstrated by the respirometric activity of the microorganisms in Deep Clean™ Multi.

As shown in Figure 4, the patented beneficial microorganism in Deep Clean Multi helps reduce soil buildup and odors by degrading both the long- and the short-chain fatty acid compounds found in kitchen soil. In addition to degrading the short-chain volatile fatty acids (VFAs) such as valeric, butyric, acetic, and propionic compounds, the microorganisms in Deep Clean Multi have also been shown to degrade ketones found in urine malodors.



**Fig. 4.** The ability of a patented beneficial microorganism in Deep Clean™ Multi to degrade both the long- and the short-chain fatty acids responsible for buildup and malodors is demonstrated by a respirometry test.

## **Recommended use directions**

Deep Clean Multi is a fully formulated 5X concentrate that must be diluted to create a finished ready-to-use product. Prior to diluting, mix the contents of the container well. If possible, use the entire container to formulate the end product. Dilute 1 part Deep Clean Multi with 4 parts water (soft water is recommended). If necessary, adjust the pH to 8–9.5. Blend slowly for a minimum of 30 minutes to ensure proper spore dispersion in solution. Do not allow product to stand without agitation during repackaging. Diluted correctly, Deep Clean Multi provides sufficient preservation for the finished formulation provided that standard facility cleaning protocols are followed.

Deep Clean Multi can be used for general cleaning when diluted at 2–4 oz/gal (62.5–125 ml/4 L) water. When used as directed, Deep Clean Multi eliminates the need for rinsing after mopping.

The addition of fragrance to Deep Clean Multi is not recommended as it will cause phase instability.

## **Safety, handling, and storage**

Safety, handling, and storage guidelines are provided with all products.

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