

TECHNICAL SAFETY DATA SHEET

HD93 - BIO CLEANING SOLUTIONS - Microzyme™ 50 Surf Clean Conc 10X FF

Section 1. Product Description and Picture

HD93 is unique bio-enzymatic formulation for cleaning hydrocarbons (oil, petrol, diesel and grease) form all surfaces.

How does Microzyme 50 Surf Clean work?

Oily stains on any surfaces are often complex mixtures of automotive or maintenance products. Microzyme 50 Surf Clean contains a blend of microbes developed to break down these oily compounds. By combining the residual effects of patented bio-enzymatic technology with patent pending surfactant technology, Microzyme 50 Surf Clean is a product that is both safe and powerful. It sets a new standard for cleaning concrete and other surfaces and is truly unique among cleaning and maintenance products, and is a safe alternative for effectively cleaning problematic oil stains left by or on cars, trucks, surfaces and equipment.

Section 2. Benefits

- A visually cleaner garage floor and driveway with less effort
- Enhance the office, factory and your home's curb appeal with a fresh, clean sidewalk
- Deep-clean tough stains in the workshop, factory garage and basement with a product that is safer for family and pet than the chemical alternatives
- More effective than a solvent-based product, yet is safe to use and friendly to the environment
- Use one product for a wide range of cleaning applications including garage floors, basements, outdoor furniture, tools and equipment

Section 3. Features

- Non-toxic, non-flammable biodegradable cleaner
- Contains virtually no volatile organic compounds (no toxic odours)
- Effectively cleans a variety of hard surfaces
- Safer alternative to harsh chemical (caustic or acidic) cleaners
- Non-corrosive and non-irritating formulation means it's safer for users and the environment
- Easy to use

Section 4. Product Characteristics

Bacteria Counts	:	108 x 10 ⁷ cfu/ml (108 million/ml)
Bacteria Type	:	Blend of Bacillus and Paenibacillus spores
Packaging	:	5 and 25 litre containers
pH	:	7.0 – 9.0
Salmonella	:	Not detected
Fragrance	:	Mild chemical odour
Shelf-life	:	Two years; maximum
Appearance	:	Tan brown liquid
loss of 1.0 log at recommended storage	:	condition

Section 5. Storage Handling

- Store closed containers at room temperature
- Wash hands thoroughly with warm, soapy water after contact • Avoid eye contact.

Section 6. Dilution Guidelines

- Microzyme 50 Surf Clean Conc. 10X FF is a 10X concentrate
- This is diluted 1:9 with water and stirred well for 30 minutes to produce a Ready To Use Product
- Pack under agitation to ensure spore dispersion in the product

Section 7. Directions for use of RTU product

- Use full strength for heavily stained areas
- Spray or pour on area to be cleaned and scrub with broom or brush
- Allow product to stand 10-20 minutes, longer for tough stains
- For best results always scrub before rinsing
- For the more stubborn stains, since oily stains penetrate deep into porous concrete, and for those that have been there for a long period of time it may be necessary to repeat the application
- For general cleaning, use 200 – 400 ml per liter of water
- For more soiled areas you may have to vary the level of concentrate
- Due to product's ability to remove hydrocarbon oils, use on asphalt surfaces more than twice yearly is not recommended (however, the removal of asphalt from surfaces is recommended more frequently)

Section 8. Bio Cleaning Solutions, means Green Technology

This unique formulation meets the criteria for a bio cleaning solutions programme for green technology. The bio cleaning solutions designation is used for formulations that utilise surfactants at a neutral pH, contain no phosphates, no solvents, and low concentrations of volatile organic compounds (VOC). Therefore, it is safe for the user and the environment.

Section 8. Applications

- Basement floors
- Driveways
- Garage floors
- Outdoor furniture
- Patios
- Sidewalks
- Tools and outdoor equipment
- Workshops

Application	Directions for Use
Clean petrol, diesel/oil from water	<ul style="list-style-type: none"> Blend Microzyme 50 Surf Clean with warm water 3:1 (3 parts water: 1 part Microzyme 50 Surf Clean) Spray onto the rainbow floating on the water Notice how the rainbow immediately disappears
Cleaning grease and fuel grime on equipment, i.e.: fuel pumps, tractors, farm equipment, etc.	<ul style="list-style-type: none"> Blend Microzyme 50 Surf Clean 3:1 with warm water Spray on equipment you wish to clean grease from Depending on the extent of grease you may wish to brush it on so as to create agitation and a better opportunity for the bacteria to work Wipe off after letting stand for 30 seconds – 30 minutes or high-pressure wash
Motor oil stains on concrete and other hard surfaces	<ul style="list-style-type: none"> Blend Microzyme 50 Surf Clean 3:1 with warm water Spray onto the stain on the concrete Note: motor oil stains have dirt on top and product cleans oil from dirt but dirt needs to be washed off or nothing visible will happen Wash stain with rag or brush on and you will notice it seems like mud and will smear concrete Wash concrete until smear is gone Re-apply blend of Microzyme 50 Surf Clean to concrete surface Scrub with brush or broom Wash with power washer or hose if possible after at least one hour or let sit indefinitely Motor oil stains are quite muddy and require some effort to remove and will not disappear like lighter hydrocarbons will
Cleaning soot and oily stains from fabrics, concrete, etc.	<ul style="list-style-type: none"> Blend Microzyme 50 Surf Clean 5:1 with warm water Spray on carpet and work around with wet cloth or sponge Once black marks are reduced to slight darkened area on carpet, squeeze water out of clean sponge onto carpet and reabsorb from carpet and all black stain will be lifted from the material Rinse sponge and repeat until completely clean
Cleaning soot from oil furnace on concrete	<ul style="list-style-type: none"> Blend Microzyme 50 Surf Clean 5:1 with warm water Spray onto concrete area affected by stain Work area with brush Wash out with water until clean
Cleaning furnace oil, diesel and gasoline stains and spills in concrete, asphalt, brick, siding etc.	<ul style="list-style-type: none"> Blend Microzyme 50 Surf Clean 4:1 with warm water Spray on surface and scrub with brush/broom till lather develops Let sit indefinitely if in someone's house, i.e.: basement, the stain will go away over time Power wash or wash with hose if outside after letting sit for at least one hour
Cleaning furnace oil, oil, diesel or petrol on the ground and on grass	<ul style="list-style-type: none"> Blend Microzyme 50 Surf Clean 3:1 with warm Water Use equal volume of concentrate to spill Pour mixture on ground Let sit indefinitely