



High Performance Eco-Cleaning™

ECO-SHOWER[™] Heavy-Duty Cleaner & Degreaser

Introduction



Powerful degreaser in the tradition of Techspray's Blue Shower[®] cleaners. Innovative formula uses naturally-based ingredients like citrus and soy oils to soak in and quickly cut through oil and grease.

Use full strength for heavy grease or dilute with water for general cleaning (see below for dilution instructions). Ideal for cleaning tools, parts, shop equipment, motors, and industrial working surfaces. Leaves high-gloss finish, so ideal for stainless steel.

Convenient pre-saturated wipes available in a pop-up dispenser. Wipe material is low linting with patented dual-texture that has scrubbing surface on one side, wiping surface on the other.

One quart (with a trigger sprayer) and one gallon containers are ideal for surface and tool cleaning. Packaging is selected to be easily recyclable. Quart labels made of recycled paper, and cartons made of 40% recycled material. Trigger pump on quart eliminates the need for propellants, which can have a global warming impact.

Eco-ShowerTM Cleaner is fully compliant with CARB (California Air Resource Board) requirements.

Also compliant with European REACH (Registration, Evaluation, Authorization & Restriction of Chemicals) and WEEE (Waste Electrical and Electronic Equipment Directive) initiatives. It does not contain RoHS (Restriction of Hazardous Substances) restricted substances, SVHC (Substances of Very High Concern) list substances, or halides.

Features / Benefits

- Clean heavy oil & grease
- Concentrated and dilutable
- Non-flammable
- Non-corrosive, moderate pH
- Safe on most plastics and painted surfaces
- Biodegradable
- Low VOC, zero GWP
- Non-ozone depleting

Specifications

• Daimler / Mercedes Benz - MSC# 3104 (1500 bulk)

Applications

- Removal of heavy greases and oils
- Cleaning on and around heavy machinery
- · Cleaning shelves and other surfaces

<u>Application</u>	<u>Suggestions</u>
Heavy degreasing	Leave on 30-60 sec
Light degreasing	2:1 to 10:1
Batch degreasing	Can be used in ultrasonic tank full strength or diluted, depending on soil
Power washer	10:1 to 30:1
Concrete spot cleaning	Hose off after 15 min
Adhesive cleaning	Leave on 30-60 sec
Stainless steel cleaning (polished)	Wipe until dry
Carpet/upholstery spot remover e.g. oil, paint	1:1 to 3:1 to avoid foaming
Telecomm cable lube "ickypic"	Use full strength
Adhesive cleaning (dry)	Let soak

Dilution Instructions

- Full strength Caked-on grease (e.g. compressors, engines, etc.), grills*, oil stains*
- 10 parts water: 1 part Eco-Shower Greasy tools, floor (e.g. concrete) stains*, vents, heavily stained (food) appliances*, scuff marks on doors, heavy grease on wheels
- **30-50 parts water : 1 part Eco-Shower** Chrome fittings, stainless steel, very light general cleaning

About TECHSPRAY RENEW™

TECHSPRAY RENEW[™] is a brand that represents **High Performance Eco-Cleaning**[™]. Techspray[®] has applied our expertise in solvent cleaning to formulate some of the most effective eco-friendly cleaners on the market. Performance is our top priority, using the best "green" solutions as they become available. We all are at the cusp of the ongoing movement toward sustainable products, packaging, and processes. It is Techspray's intention to stay at the cutting-edge while keeping our products powerful and cost effective.

Directions

- Spray and saturate the soiled area. Let soak for 30-60 seconds depending on thickness of the grease.
- Using a lint-free wipe (we recommend Techspray 2364-50 or 2365-300 wipes), wipe lightly at first to allow cleaning agent to break down residues.
- Continue to wipe in a circular motion until the grease or oil is fully removed.
- For thick greases, reapplication may be needed.
- On walking surfaces, mop thoroughly after cleaning.
- Material is easily rinsed by wiping with water dampened cloth.
- Dispose of soiled wipe as appropriate depending on the type of material removed.

Chemical Components

Component	CAS#
Alcohols,C10-14, ethoxylated	66455-15-0
d-Limonene	5989-27-5
Alkyl C16-C18 Methyl Esters	67784-80-9
Includes other hazardous components in non-reportable quantities.	

^{*} If on food processing equipment or walking surfaces, must be washed/mopped thoroughly to avoid slippery surface and undesirable residues.

EXPOSURE LIMIT: Limits on components not established.
 Manufacturer's recommendation 1000 ppm.

PHYSICAL STATE: Liquid

ODOR: Citrus odor

• APPEARANCE: Clear, mobile liquid

pH: 6-7

PERCENT VOLATILE: 99% at 104°C

VAPOR PRESSURE: < 0.014 mmHg@20°C (VOC Composite Vapor Pressure)

BOILING POINT: 203°F (95°C)

• FLASHPOINT AND METHOD (TAG Closed Cup): None to boiling point

SOLUBILITY IN WATER: Dispersible

DENSITY: ~1.00 at 25°C
 VOC (by wt): 3.24%, 32.4 g/l

Performance

Tested according to modified MIL-PRF-29608 4.59 standards:

Soil is applied to cleaning coupons, sprayed with cleaning fluid, allowed to sit 10-seconds, then a poly-cellulose wipe (saturated with same cleaning fluid) is dragged across one time using a dowel to maintain consistent pressure. Percentage refers to the amount of soil (by weight) removed from stainless steel test coupon.

* Composition of lube/soil blend: 2 parts Mystik #2, 2 parts Lubriplate #1242, 2 parts Slick 50 #1, 1 part Lubriplate 80W-140, 1 part Silicone TBF9-350, 1 part soil.

SAMPLE ID	SOIL	CLEANING EFFICIENCY
1500 Eco-Shower	Lube/Soil Blend*	94%
Simple Green	Lube/Soil Blend*	89%
Hydroforce	Lube/Soil Blend*	90%
Control dry wipe	Lube/Soil Blend*	29%
Control H2O wet wipe	Lube/Soil Blend*	42%

SAMPLE ID	SOIL	CLEANING EFFICIENCY
1500 Eco-Shower	Mystik #2	90%
Simple Green	Mystik #2	79%
Hydroforce	Mystik #2	79%
Control dry wipe	Mystik #2	17%
Control H2O wet wipe	Mystik #2	16%

Metals

Test method: 15 minute immersion at room temperature in sealed jar, remove, wipe dry, and make observations. Observations made immediately after removal and drying, and 1 hour later.

Material	Compatibility
Brass foil	Excellent
Copper foil	Excellent
Nickel 200	Excellent
Aluminum 6061	Excellent
Aluminum 2024	Excellent
Anodized aluminum	Excellent
Stainless Steel 316	Excellent
Stainless Steel 304	Excellent
Mild carbon steel	Excellent
Galvanized Steel	Excellent

Note: Eco-Shower TM is a water-based formula, so will encourage oxidation with prolonged exposure to iron, steel, and other susceptible metals.

Plastics

Test method: Tested as bulk unstressed coupons, and the following immersion times for the base chemistry: 1 minute, 5 minutes, and 15 minutes.

Material	Compatibility
ABS	Excellent
Nylon	Excellent
Lexan	Excellent
HDPE	Excellent
LDPE	Excellent
C. E. Phenolic	Excellent

Material	Compatibility
PMMA	Good (1)
POM	Excellent
PP	Excellent
PS	Good (1)
PTFE	Excellent
PVC	Excellent

^{1 =} Slight softening after 15 minutes of exposure.

Environmental Policy

Techspray[®] is committed to developing products to ensure a safer and cleaner environment. We will continue to meet and sustain the regulations of all federal, state and local government agencies.

Packaging and Availability

Eco-ShowerTM Cleaner available in the following sizes:

1500-72DSP 72 count pre-saturated wipes, 6" x 10.5" (15cm x 26.7cm)

1500-QT 1 quart (0.95L) w/ trigger sprayer

1500-G 1 gallon (3.8L)

Available as special order, call for pricing:

1500-5G 5 gallon (19L) 1500-54G 54 gallon (205L) 1500-275G 275 gallon (1,045L) Techspray® products are supported by global sales, technical and customer services resources.

For additional technical information on this product or other Techspray® products in the United States, call the technical sales department at 800-858-4043, email tsales@techspray.com or visit our web site at: www.techspray.com.

North America Europe
Techspray ITW Contamination Control
P.O. Box 949 Skejby Nordlandsvej 307
Amarillo, TX 79105 DK-8200 Aarhus N
800-858-4043 +45 87 400 220
email: tsales@techspray.com email: info@itw-cc.com

Countries Outside US
Call to locate a distributor

in your country.

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