# 438

## CHESTERTON Global Solutions, Local Service.

### **PTFE COATING**

#### **Description**

Chesterton® 438 PTFE Coating represents the best combination of a clean, dry, PTFE -based powder lubricant with a tough, protective coating that resists water and chemicals. It does much more than simply reduce friction; the product actually coats and protects the surfaces of parts and equipment.

438 PTFE Coating effectively lubricates and protects smooth, nonporous surfaces, including metal, plastic, wood, leather, fiber, rubber, glass and painted surfaces. It will not rub, wipe or run off like liquid lubricants can, nor will it collect dirt and grime as grease lubricants are prone to do.

It dries instantly, leaving no waxy or oily film that can stain and attract dirt particles, thereby eliminating quality control losses from stained or damaged products and packaging. The coating resists water washout, as well as mild acids and alkalies, thus reducing the number of applications necessary to maintain functionality.

Because 438 PTFE Coating makes the surface of parts and equipment extremely slippery, the product is ideal for coating inner surfaces of hoppers, bins, slides and anywhere else adherence of material is a problem. Applying the coating to these surfaces eliminates hangups and costly production stoppages. When several coats are applied, the product provides long-lasting surface protection and helps resist abrasive wear.

#### **Composition**

438 PTFE Coating utilizes ultra-fine PTFE particles dispersed in a tough acrylic resin binder, giving the product a hybrid quality as both an excellent dry lubricant and strong protective coating.

Although there are other solid lubricants on the market, a PTFE-based product has several key advantages.

■ PTFE is well-recognized for its extremely low coefficient of friction. Since it is one of the more slippery substances

Typical Physical Properties	
Appearance	Dry, white powder in clear film
Binder	Acrylic resin
Base	Pure PTFE powder
Specific Gravity	0,85 kg/l (7.1 lbs/gal)
Operating temperature limit	Up to 121°C (250°F)
PTFE particles	Micron-sized

known to science, surfaces lubricated with it slide easily over each other.

- It is a hydrophobic and chemically inert material, meaning that it will resist water and chemicals. While conventional lubricants can absorb and entrain moisture, 438 PTFE Coating repels it, thus keeping parts protected longer against corrosion. It will not be attacked by alkali or acidic cleaning products, an all-too-common problem for many other lubricants.
- The product is nonstaining and will not cause electrolytic pitting. Unlike metal-based solid lubricants, 438 PTFE Coating will not stain the surfaces it coats. Galvanic corrosion is prevented because no electrolytic cell is established.

When a clean, dry lubricant is needed because of heavy dirt and dust loads in the surrounding work environment, why settle for a product that can only lubricate? 438 PTFE Coating stays on surfaces to provide a long-term, slippery, protective coating that enhances production, prolongs the life of machinery and equipment and saves the costly time and expense of frequent relubrication.†

- † For applications requiring liquid lubrication, use Chesterton® 601 Chain Drive Pin & Bushing Lubricant or Chesterton® 610 Synthetic Lubricating Fluid.
- \*\*For long-term dry lubrication of porous surfaces, use Chesterton® 677 Dry Lubricant.

#### **Applications**

438 PTFE Coating, a versatile, longlasting PTFE powder reinforced film, protects all types of smooth, nonporous surfaces, including metal, plastic, wood, leather, fiber, elastomers, glass and painted surfaces.\*\* It can be used on instruments, machine tools, conveyor belts, bearings, cold molds, dies, and even drawers and windows. When used to coat inner surfaces of bins, tanks, hoppers, molds and slides, the lubricant helps prevent materials from adhering, thus avoiding hangups and production stoppage. It is excellent for paper converting equipment to stop the paper from shifting as it is folded.

#### Features

- Contains ultra-fine PTFE particles
- Slippery; low coefficient of friction
- Dry, non-oily, non-greasy
- Clean, nonstaining
- Specifically designed for smooth, nonporous surfaces
- Excellent chemical resistance
- Strong resistance to washout
- Will not absorb or hold moisture
- NSF H2 Registration number 133951 (bulk) and 133950 (aerosol)

#### Renefits

- Stop sticking and material buildup
- Significantly reduce power consumption
- Prolong the life of machinery and parts
- Save the cost of replacement parts
- Reduce lubricant costs
- Reduce maintenance costs
- Save production time

#### **Directions**

Surface to be lubricated should be free of dirt, oil, grease, moisture, rust, lint, etc. Shake can vigorously until agitator rattles, then continue shaking for 60 seconds before applying. Test on a sample of the same material to ensure compatibility. Spray with a sweeping motion, keeping can 20 to 31 cm (8 to 12 inches) from surface. Apply uniformly. Users need only apply a thin coating, so there is no waste. Can apply several coats to build up greater surface protection and resist abrasive wear. Allow each coat to dry separately.

#### Safety

Before using this product, review the Material Safety Data Sheet (MSDS) or the appropriate safety sheet for your area.

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860 Salem Street Groveland, Massachusetts 01834 USA Telephone: (781) 438-7000 • Fax: (978) 469-6528 www.chesterton.com