

## DAIRY- COAT ULTRA ANTI-BAC

### 1. DESCRIPTION

Antel's Dairy-Coat Ultra Anti-Bac is a high quality high build two component solvent free epoxy coating for application to new and existing concrete floors, render, and metal substrates. It provides a smooth, easily cleaned surface which is resistant to dirt, moisture, oil, light-medium abrasion and chemical attack. Where slip resistance is required, and in accordance with BS 7976-2, the addition of Anti-Slip aggregate is required in most cases.

### 2. FEATURES AND BENEFITS

- ✓ Dairy Coat Ultra Ant-Bac has been further enhanced by the addition of a highly effective anti-microbial agent that has a 99.999% kill rate against E. Coli and MRSA.
- ✓ The additive contained will not leach and has no environmental impact.
- ✓ Its effectiveness is unaffected by:
  - Scratching or abrasion
  - UV exposure
  - Salt Spay
  - Temperature cycling
  - Cleaning chemicals including Chlorine Bleach, Disinfectants, Quaternary Ammonium Compounds.
- ✓ Effective for the life time of the coating.
- ✓ The active ingredient is effective against most bacteria including Listeria Monocytogenes, Salmonella Enteritidis, Pseudomonas Aeruginosa and Aspergillus Niger and specifically tested against MRSA and E. Coli.
- ✓ No document evidence that bacteria strains have become resistant.

### OTHER FEATURES AND BENEFITS

High build—200 µm per coat.  
Good early strength characteristics.  
Good chemical resistance.  
Good resistance to heavy traffic.  
Can be made non-slip.

Superb adhesion to concrete.  
Dustproof and waterproof.  
Impermeable to water and other liquids.  
Provides a closed hygienic surface.  
Decorative finish.

### 3. USES

- Factory floors
- Food/hygiene e.g. Abattoirs,/milking parlours
- Car plants
- Hospitals
- Garages
- Metal Substrates

### 4. INSTRUCTIONS FOR USE

#### 4.1 Preparation

##### **Substrate:**

New concrete should be at least 1 month old. The surface should be acid etched and then rinsed thoroughly and allowed to dry totally. The substrate must have a minimum compressive strength of 25 N/mm<sup>2</sup>. Moisture content should not exceed 5% and relative humidity at the slab surface should not exceed 75%. All oil and grease must be removed. Damaged areas should be repaired using Antel's Epoxy repair mortar. The surface should be free of laitance, etc. Cleaning by mechanical means such as grit blasting or scabbling is very important. Concrete contaminated with oil or grease requires suitable preparation such as steam cleaning using a suitable detergent to remove the contaminant.

**Metal substrates.** The substrate should be mechanically keyed, removing all signs of rust. All oil and grease must be removed using a good quality degreaser.

#### 4.2 Priming

Priming is necessary when the substrate is poor even after preparation and if substrate is new or porous. Failure to prepare the surface correctly may result in bad bond formation. Therefore, it may be necessary to apply a primer.

#### 4.3 Mixing

Add the entire contents of the B Pack to the A Pack, scraping out the contents and mix the resin and hardener components thoroughly with drill paddle. Do not speed mix as this can affect the workability of the material. Once mixed, transfer to a shallow tray immediately. This will help to dissipate heat and give a longer working time.

Once mixed, it is only possible to apply a single coat. Do not attempt to return to the mix to apply a second coat.

### 5. APPLICATION

#### 5.1 WALL APPLICATION

Apply using a suitable brush and/or good quality low pile or foam roller. As the material is high build, make sure to push/roller the material out. Observe areas just coated while applying to ensure no 'runs' or drips are forming. Back roller if required on these areas, but not on areas that may be 'tacky'. 1 coat of primer plus 1 top coat is necessary on wall areas. Apply the top coat 24 hours after priming.

#### 5.2 FLOOR APPLICATION

The coating can be applied by pouring onto the substrate and then spreading with a suitable squeegee set at the correct depth and then back roller with a quality medium pile roller to achieve a smooth, even finish. A second coat shall be applied in the same manner once the first coat is tack free. If a non-slip finish is desired, the application of Anti-Slip aggregate is required and should be applied on to the first coat while wet. A further 24 hours should be allowed before permitting traffic. Maximum inter coat time 24 hours.

### 6. PACKAGING AND COVERAGE

Antel's Dairy-Coat Ultra Anti-Bac is available in 5 Kg packs. Coverage is 25m<sup>2</sup>/5Kgs

### 7. CLEANING

Brushes and roller equipment should be cleaned with Antel's Standard Epoxy Cleaning Solvent.

### 8. STORAGE

Store in a dry, cool, and frost free place in their original containers.

### 9. TECHNICAL DATA (20°C)

Pot life	30 minutes
Application thickness	200-225 µm per coat
Initial cure	8 – 10 hours
Intercoat time	24 hours
Pedestrian traffic	24 hours
Heavy traffic	36 hours
Full Cure	7 days
Compressive Strength	65 N/mm <sup>2</sup>
Flexural Strength	26 N/mm <sup>2</sup>
Abrasion Resistance	0.18 grams weight loss CS-17 wheel 1000 cycles 1 kg

#### Slip Resistance

Over a third of all major injuries reported each year are caused as a result of a slip or trip. Health and Safety

Executive statistics suggest that there is one serious slip accident every 3 minutes.

**Using the TRL Pendulum Slip/ Skid Resistance Tester in accordance with BS 7976-2**, Slip/Skid Resistance Testing can be carried out to assess the floor surface slipperiness in workplace and public areas.

Facilities managers, local authorities and building owners are under obligation to ensure the floor or surface of the traffic route is not slippery so there is no risk of injury to any person. This is enforced by the **"Workplace (Health, Safety and Welfare) Regulations 1992"**.

The UK HSE's preferred method for Slip assessment is based on a combination of two values:

1. Pendulum coefficient of friction (CoF) test resulting in a PTV rating.
2. Surface roughness value (Rz)

**Surface Micro Roughness Assessment/Testing**

Research has shown that measurement of the RZ parameter allows slipperiness to be predicted for a range of common materials. A roughness reading can be used as supporting evidence with the results of a pendulum test.

The pendulum test value (PTV) should be not less than 35 in situations where ease of cleaning is more critical than slip resistance and/or where all who use or are likely to use the floor will wear specially provided slip resistant boots or shoes. Pendulum test values in the wet of not less than 33 may be deemed acceptable.

Slip Resistance Guidelines		
PTV	Surface Roughness $\mu\text{m}$	Potential for slip
0 to 24	$\leq 9$	High
25 to 35	10 to 19	Moderate
$\geq 36$	$\geq 20$	Low

<b>Antel Dairy-Coat Ultra Results - based on application of 0.3 – 0.6mm Anti-Slip Aggregate</b>	
<b>In accordance with <u>BS 7976 Pt 1 -3</u></b>	
PTV (Dry)	75
PTV (Wet)	60
Surface roughness (Rz)	92 $\mu\text{m}$

**Chemical Resistance**

Sulphuric Acid	30%	Excellent
Sodium Hydroxide	25%	Excellent
Engine Oil		Excellent
Lactic Acid	25%	Good
Ammonia Solution	25%	Good
Citric Acid	25%	Excellent
Petrol		Excellent
Sugar Solution	40%	Excellent
Hydrochloric Acid	30%	Excellent
Xylene	-	Excellent
White Spirit	-	Excellent
Skydrol	-	Excellent
Petrol	-	Excellent
Methanol	-	Moderate
Bleach	10%	Excellent

Further technical information can be made available on request. Please contact the Antel Technical Department.