

# Airplane Hangar Floor Cleaning

In-Depth Floor Cleaning in Preparation for Painting using MICROCAT® - SMPL Hydrocarbon Cleaner/Degrader and MICROCAT® - SMPL Hydrocarbon Degrader - Bse 084



#### **Problem**

Over time this hangar floor had received a large amount of oil spillage and leakage. Conventional cleaning techniques failed to remove the oil residues sufficiently to allow recoating the floors with new epoxy paint. In particular, oil had penetrated and hardened in small cracks and pores in the concrete floor such that conventional cleaning did not remove the residues adequately to ensure adhesion by the new epoxy coating.

The objective was to effectively remove the oil stains on and residues in the concrete floor and treat The resultant hydrocarbon water mixtures in an environmentally safe and responsible way – as "green" as possible - in preparation for painting.

## **Products Used**

MICROCAT®-SMPL Hydrocarbon Cleaner/Degrader (liquid formula) and MICROCAT®-XR Hydrocarbon Degrading Bioformula (dry formula)

# Site History

In hangars where airplanes are kept, dripping oil and other hydrocarbons make stains on the concrete floors. This not only includes motor oil, but also on occasion diesel fuel, hydraulic fluid and gasoline. These residuals are difficult to remove, and they should not be removed and simply discharged directly to the environment or into the sewer system without treatment.

## Cleaning Methodology

- 1. MICROCAT®-SMPL Hydrocarbon Cleaner/Degrader is diluted and sprayed over the entire floor surface
- 2. Then MICROCAT<sup>®</sup>-XR Hydrocarbon Degrader is mixed at a ratio of 25 pounds (11.3 kg) to 110 gallons (0.42 m³) of water, and then scrubbed into the floor surface using a broom. The floor is kept wet for 24-48 hours by misting from a water hose. The floor is then hosed off and the mixture is discharged to the sewer.
- 3. The floor is treated with a peroxide solution in order to eliminate biological activity and allowed to dry.
- 4. The floor is now ready for epoxy paint application.

#### Results

MICROCAT®-SMPL Hydrocarbon Cleaner/Degrader and MICROCAT®-XR Hydrocarbon Degrader did an excellent job of removing dirt, oil and grease from the concrete floor in preparation for application of epoxy coating.

### **Conclusions**

MICROCAT®-SMPL Hydrocarbon Cleaner/Degrader and MICROCAT®-XR Hydrocarbon Degrader can be used individually or in combination to remove dirt, oil, grease and other hydrocarbon stains from concrete surface and floors in preparation for cleaning.

## Related MICROCAT® Products

XRC	Oil spill absorber and degrader
XRCP	High capacity oil spill absorber and degrader
SK	Oil spill absorber and degrader
BK-A	A natural, biodegradable organic dispersant used in combination with MICROCAT®-BK-B
BK-B	Bioremediates hydrocarbon contamination in liquids and on any solid or semi-solid surface
XBS	Bioformula for bioremediation of contaminated soils
HX	Specialized microbes and activated carbon for reduction of hydrocarbons
Biobag	Stormwater Pong surface cleaner

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