

# DuPont™ 13205S™

## Aluminum Cleaner

### Type

---

DuPont 13205S™ is an aqueous phosphoric-acid based cleaner.

### Description

---

DuPont 13205S™ provides deep cleaning, brightening, and conditioning of aluminum surfaces in preparation for a subsequent conversion coating. This step is commonly referred to as acid etch treatment.

### Recommended Uses

---

DuPont 13205S™ Aluminum Cleaner is recommended as part of an aluminum pre-treatment system with DuPont 13206S™ Aluminum Conversion Coating. DuPont 13205S™ should not be used on high copper bearing aluminum alloys (e.g. 2024) or aluminum castings. DuPont 13204S™ Aluminum Alloy and Metal Cleaner should be used instead. Following conversion coating, recommended primers include Corlar® 13550S™ Corrosion-Resistant Epoxy Primer and Corlar® 13570S™ Non-Chromate Epoxy Primer.

### General Information for Use

---

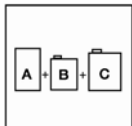
#### Components

DuPont 13205S™ Aluminum Cleaner



#### Mix Ratio

Dilute 1 part DuPont 13205S™ with 2 parts water for heavy oxidation and corrosion removal.  
Dilute 1 part DuPont 13205S™ with 5 parts water for light oxidation and corrosion removal.



### Application

---

#### Substrates and Surface Preparation

Substrate must be properly prepared for application. As a minimum, aluminum surfaces should be scrubbed/scuffed with Scotch-Brite 7447 pads (or coarser) using an alkaline aviation cleaner. Work area should be kept wet and rinsed with clean water, not allowing detergent to dry on the clean surface. Surface must be “water break free”, meaning water sheets out completely over the metal surface. Any beading up or breaks indicate surface contamination where cleaning must be repeated.



**Aviation Finishes**

---

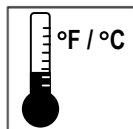
### Pre-Treatment Process

The usual process to prepare aluminum substrate for priming is:

1. Apply the DuPont 13205S™ Aluminum Cleaner solution
2. Water rinse
3. Apply the DuPont 13206S™ Aluminum Conversion Coating solution
4. Water rinse
5. Dry

### Tips for Success

- Select size of area to be treated considering method of application, condition of surface, and temperature. Typical treatment time where DuPont 13205S™ is in contact with the metal surface prior to rinsing is between two and five minutes.
- Do not allow DuPont 13205S™ solution to dry on surface prior to thorough rinsing. Rinsing removes both residual phosphoric acid solution, salts, and lifted contaminants.
- Removal of heavy corrosion can be aided by scrubbing with a Scotch-Brite pad.
- While rinsing, look for water break free sheeting of the rinse water. Any areas not showing smooth sheeting must be re-cleaned. Scrub with Scotch-Brite 7447 pads using alkaline aviation cleaner or DuPont 13205S™ Aluminum Cleaner until rinse is water break free. Repeat DuPont 13205S™ application and thorough rinse.



---

### Environmental Conditions

DuPont 13205S™ should be applied between room temperature and 110°F (43°C).

---

### Physical Properties

VOC	Less Exempts (LE)	As Packaged (AP)
DuPont 13205S™	3.9 lbs/gal	1.3 lbs/gal

---

### Factory-Packaged Cleaner

Color	Clear
Shelf Life	2 years (Unopened at 50° – 110°F)
Gallon Weight	9.3 lbs/gal

---

### Safety and Handling

DuPont is committed to helping you develop and maintain a safe working environment. Carefully read the specific warnings and precautions printed on the labels and material safety data sheets (MSDS) of all DuPont products before handling and using. These products are for industrial use by trained professional painters only. Do not permit anyone in the painting area without protective equipment per product MSDS.

Revised 8/2005



**Aviation Finishes**