

# APEX Technology

*Sustainable Program for Paint Detackification*



**NALCO Water**  
An Ecolab Company



# APEX Technology for Paint Detackification

*Nalco Water innovation helps meet sustainability goals across the Automotive Industry*

During the last decade, the automotive industry has increasingly demonstrated a strong commitment to Corporate Social Responsibility (CSR). In particular, many programs and procedures have been put in place to help meet sustainability targets to reduce the consumption of natural resources and associated emissions and waste. Today, more than ever, the challenges of the global economic environment demand that the industry must work even harder to meet sustainability targets and financial goals. Cost control and reduction of the Total Cost of Operation remain key factors in managing operating profitability.

Every automotive plant worldwide has strict environmental management practices in place which aim to:

- Reduce emissions to air, in particular CO<sub>2</sub> and other greenhouse gases, and Volatile Organic Compounds (VOC)
- Reduce energy consumption using innovative technologies
- Reduce fresh water use
- Minimize waste production

## Nalco Water Solution

The technologies used today in Paint Detackification were developed in the mid-1980s. Nalco Water, the worldwide leader in sustainability services and integrated and innovative water treatment solutions, has more recently focused its Research & Development capabilities upon the development of a new generation of advanced Paint Detackification programs. As a result of these efforts, Nalco Water offers its innovative APEX Technology, including the first truly effective, 99% biodegradable paint detackifier chemistry.



*Superior program performance: a combination of new and innovative chemistries*

## Detackifier Composition is focused on Safety and Sustainability

- Over 99% sustainable and renewable raw materials
- Zero VOC
- Zero Formaldehyde
- Not classified as dangerous in accordance with Directives 67/548/EEC or 1999/45/EC
- Product is not regulated during transportation

## Flocculant (Polymer) - ULTIMER™ technology

- Winner of US Presidential Green Chemistry Award
- No oil content
- Easily applied

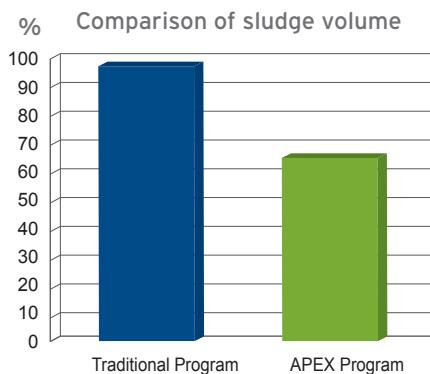
## Antifoams - Improved high performance materials

- High active content
- Requires low dosage
- Environmentally-friendly
- Advanced formulations
- Zero VOC

## Performance & Results

APEX Technology has been successfully implemented in paint booth systems using all kinds of paint types (polyurethanes, 2K clear coats, high solids primers, high solids solvent-borne basecoats, and high solids water-borne basecoats). APEX Technology delivers complete paint detackification with improved overall system collection efficiency and cleanliness. These advanced programs can rapidly lower system turbidity and total suspended solids. Challenging foaming issues frequently observed in paint detackification systems are quickly minimized or eliminated.

After introducing APEX Technology, customers are typically able to achieve an average reduction of 20% in the Total Cost of Operation. The evaluations of the impact of APEX Technology upon customer Sustainability Performance Indicators (SPIs) in paint booth operation have shown the following average improvements:



*Comparison showing average reduction in sludge volume produced with APEX vs. a traditional program*

## Superior technical expertise

Nalco Water technical experts have extensive global experience working on every type of detackification program and use a methodical approach to demonstrate the fit and capabilities of APEX Technology.

Each paint spray booth is unique with specific Key Performance Indicators (KPIs). This requires a thorough mechanical, operational and chemical



## Delivering superior sustainability performance

	<ul style="list-style-type: none"><li>Reduction in water volume &amp; cost of more than 20%</li><li>Improved microbiological control</li></ul>
	<ul style="list-style-type: none"><li>Reduction in energy consumption &amp; cost of more than 10%</li><li>Reduction in waste volumes, disposal &amp; incineration costs of more than 30%</li></ul>
	<ul style="list-style-type: none"><li>VOC-free paint detackification program available</li><li>Reduction in odor and related number of complaints</li></ul>
	<ul style="list-style-type: none"><li>Enhanced process efficiency, product quality, or site productivity</li><li>Reduction in maintenance and specific cleaning activities &amp; costs of more than 50%</li><li>Improved air filter life</li></ul>
	<ul style="list-style-type: none"><li>Reduced emissions</li><li>Conservation of natural resources</li><li>Achievement of your sustainable goals</li></ul>

(MOC) approach to optimize booth performance. Nalco Water technologies and services, along with detailed mechanical and operational knowledge, focus on providing optimum performance for each unique system, by combining integrated solutions that improve sustainability performance.

For more information on how APEX Technology can reduce Total Cost of Operation, optimize system performance, and improve sustainability performance on-site, please contact your local Nalco Water Sales Representative.



Previous program after 2 weeks



Nalco Water APEX Program after 2 weeks



## Nalco Water Receives 2012 Automotive New Pace Award

Nalco Water, an Ecolab company, was named a 2012 Automotive News PACE Award winner by Automotive News, a leading automotive industry publication. Nalco Water was recognized in the Manufacturing Process and Capital Equipment category for its APEX paint detackification technology, the first truly effective paint detackification chemistry that is made from renewable resources, does not use formaldehyde and is completely biodegradable.

Now in its 18th year, the Automotive News PACE (Premier Automotive Suppliers' Contribution to Excellence) Awards recognize superior innovation, technological advancement and business performance among automotive suppliers. The award competition is open to suppliers who contribute products, processes, materials or services directly to the manufacture of cars or trucks.



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