



UpCore™

New Fully Approved Airbus Vendor Service Bulletin #20499-21-001
Recommending Airlines to upgrade A320 Series Ozone Converters to
Ozone-VOC Converters

Airlines increasingly are suffering flight delays and potential diversions due to cabin odor issues and fume events. These delays cost airlines money, inconvenience their customers and tarnish their image. BASF's UpCore™ offering provides a cost-effective and sustainable technology upgrade for airlines to mitigate these issues: with our UpCore™ Service, we replace your current ozone-only catalyst core with our Airbus approved ozone-VOC* catalyst core. UpCore™ is based on a standard procedure that BASF has been performing for numerous years.

Value to airlines, passengers and flight crew:

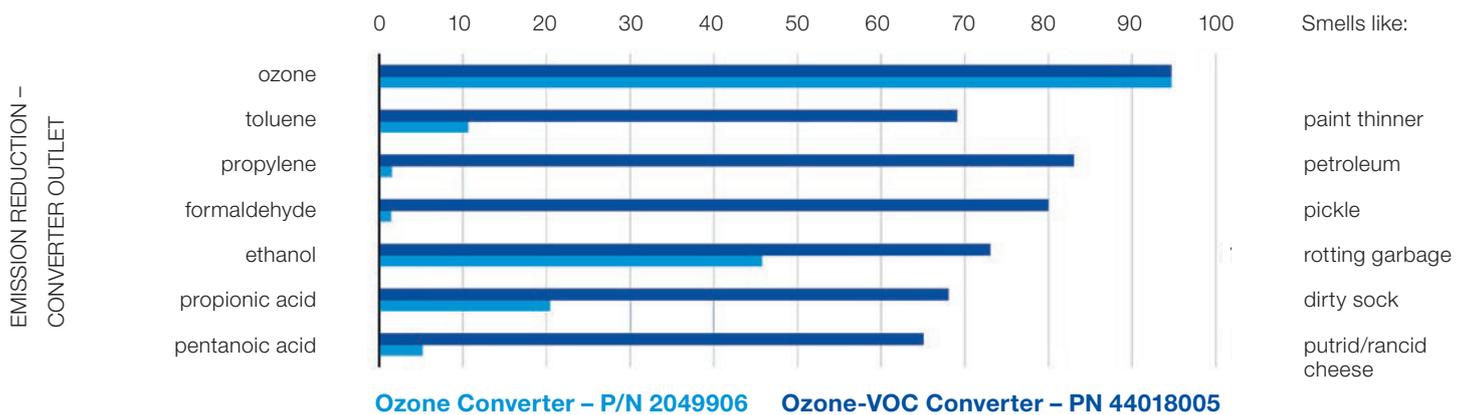


Airlines reduce the **risks of flight delays** due to cabin odor issues and fume events in a cost-effective and easy-to-implement way and save costs of odor events from \$10,000 to \$150,000, guarantee passengers and crew a **pleasant experience** and **strengthen their image**.

Passengers and flight crew **enjoy their stay** in the airplane! Without unpleasant smells like petroleum or dirty socks, they will have a positive experience on-board, leave the plane more relaxed and **spread the word** to strengthen the airline's positive image.



VOC removal: **ozone-only converter** vs. **ozone-VOC converter** treatment of bleed air after applying UpCore™:



Your benefits with UpCore™:

- Ozone-VOC converters mitigate **odor causing hydrocarbons** while retaining the necessary **compliant ozone conversion** function of standard Ozone-only converters.
- Improve aircraft **operational reliability** and **passenger/flight crew comfort** by mitigating odors entering the cabin.
- **Seamless, cost-effective and sustainable** upgrade from ozone-only converter to Airbus-approved ozone-VOC catalyst technology by reusing the existing housing.
- Reset converter performance to OEM factory new state of an Ozone-VOC converter that utilizes the **same OEM part number** as a factory new part without the need of a STC or DER. OEM equipment will meet leasing company requirements.
- Over 30 years in OEM MRO Service expertise that ensures confidence in converter performance.
- Feel confident in the upgrade as BASF's Ozone-VOC converter has been used on Airbus A320's for over 18 years.



* VOC: Volatile Organic Compounds