

DUALENE™ HPS

MODIFIED ALCOHOL SOLVENT FOR HIGH PURITY CLEANING

In high purity cleaning, the perfect interplay between machine technology, application technology and the cleaner is crucial to achieving the extremely high cleaning standards.

DUALENE™ HPS, a modified alcohol solvent, has been specifically developed to help meet exceptionally demanding cleanliness requirements of high purity applications. Used in combination with state-of-the-art closed vacuum cleaning equipment, DUALENE™ HPS enables cleanliness reproducibility, high process stability and superior surface quality thanks to:



HIGH SOLVENT PURITY

- ✓ High purity modified alcohol grade
- ✓ Synthetically produced



DOUBLE FILTRATION FOR INCREASED PROTECTION

- 2-step filtration first before production and second time during the filling process
- Solvent delivered exclusively in composite drums produced by accredited drum manufacturer Outside steel, Inside HDPE (High density polyethylene). The HDPE of the liner is FDA approved.



HIO-SERVICES

 Certificate for hydrogen-induced outgassing (HIO) substances, including analysis of silicon, measured by state-of-the-art ICP OES method

DUALENE™ HPS is further characterized by low toxicity, good biodegradability and multi-metal compatibility.



WIDE INDUSTRY APPLICATIONS

- ✓ SEMICONDUCTOR MANUFACTURING
- **✓** OPTICAL AND OPTOELECTRONIC INDUSTRY
- **✓** EUV LITHOGRAPHY
- ✓ HIGH-VACUUM TECHNOLOGY (XHV, UHV, UCV)
- **✓** SENSOR TECHNOLOGY
- ✓ LASER AND ANALYSIS TECHNOLOGY
- **✓** PHOTONICS
- **✓** THIN-FILM TECHNOLOGY
- ✓ AEROSPACE
- **✓ ELECTRONICS MANUFACTURING**
- ✓ MEDICAL AND PHARMACEUTICAL TECHNOLOGY
- **✓** E-MOBILITY

COMPLEMENTARY SERVICE ELEMENTS FOR MAXIMIZED PROCESS STABILITY

We provide additional service elements to further optimize the high purity cleaning application by maximizing process stability, extending solvent lifespan and minimizing chemical consumption (and hence raising sustainability performance).

With MAXICHECKTM Test Kits, solvent quality and condition can be easily monitored and tested on-site. The test results can provide reliable information on whether re-stabilization is required.

Where necessary, our contact-free, state-of-the-art stabilizer system, MAXISTAB $^{\text{TM}}$ S-Series, can be added to bolster process stability to enable optimal and consistent cleaning results.

SAFECHEM AS YOUR PERFORMANCE OPTIMIZER

As a pioneer of modified alcohols for precision cleaning, our long-established product DOWCLENE^{TM*} 1601 is already widely used in high-value manufacturing sectors such as aerospace, automobile and medical technology and hence represents one of the purest modified alcohols available on the market today.

With DUALENE™ HPS, we have a tailored specialty product helping to meet even higher cleaning requirements, particularly in semiconductor production, amongst others.

SAFECHEM EUROPE GMBH Tersteegenstr. 25, 40474 Duesseldorf, Germany

Phone: +49 211 4389-300 Email: service@safechem.com

www.safechem.com



Legal Disclaimer: The information and data included in this document have been carefully reviewed. However, SAFECHEM does not warrant that any information and data is complete, accurate or up to date. Furthermore, the information and data included in this document do not constitute product specifications of SAFECHEM products. It is solely the Buyer's responsibility to determine whether SAFECHEM products are appropriate for Buyer's use. Liability claims against SAFECHEM arising from using or not using the information featured in this document are excluded in principle unless there is evidence of willful intent or gross negligence on SAFECHEM's part or other cases of compelling liability prescribed by statutory law. The use of trade names, trademark rights, patents or other industrial or intellectual property rights in this document shall not authorize the use of the foregoing names, rights or brands freely, as they may be the protected or registered rights of third parties or SAFECHEM even if they are not expressly identified as such. In general, SAFECHEM retains the copyright to the entire content of this document. The duplication or use of SAFECHEM's product designations, images, graphics and texts is not permitted without SAFECHEM's explicit written consent.