

DOWCLENE™*

16 SERIES

High Performance
Modified Alcohol Solvents
for Precision Parts Cleaning






A close-up photograph of a silver, perforated metal wheel rim. The rim features a series of small circular holes along its outer edge and larger, irregularly shaped cutouts. The background is blurred, showing other parts of the wheel and a light-colored surface. A teal rectangular box is overlaid on the lower-left portion of the image, containing white text.

PRECISION
PARTS
CLEANING
WITH MODIFIED
ALCOHOL
SOLVENTS

HIGH PERFORMANCE SOLVENTS FROM THE DOWCLENE™ 16 SERIES

DOWCLENE™ 1601, DOWCLENE™ 1611 and DOWCLENE™ 1621 have diversified chemical and physical properties, enabling them to satisfy individual requirements. All grades have a low toxicity and are chemically very stable. Depending on the customer's application, SAFECEM specialists can recommend the most suitable solvent for maximum performance.

Typical physical parameter

			
Density g/cm ³ (20°C)	0.88	0.94	0.78
Boiling range (°C)	170 – 175	170 – 193	175 – 200
Water solubility mixable, water%	6.3	∞ mixable	5
Flash point (°C)	63	79	59



PROCESS OPTIMISATION AND PROCESS SECURITY

SAFECEM offers a wide range of additional services which help to optimise the cleaning process, to increase process security and to maximise cleaning results.

SOLVENT HANDLING

- Delivery of fresh solvent, available in the SAFE-TAINER™ System and in different package sizes
- Take-back of used solvent, also in the SAFE-TAINER™ System



PROCESS OPTIMISATION

- MAXICHECK™ Test Kits
- MAXIBOOST™ Solvent Additives
- MAXISTAB™ S-Series Stabilizers



CHEMAWARE™ KNOWLEDGE SERVICES

- Solvent Training
- Specialist know-how
- Consulting
- Oil Compatibility Test
- Solvent Analysis
- Special Analyses on request



Supplying modified alcohol solvents for industrial parts cleaning since 1992, SAFECHEM has always been the pioneer in this market segment. The company further developed modified alcohol formulations together with some of the leading cleaning equipment manufacturers. Today, a comprehensive solution with different grades, additives, stabilizers, and wide-ranging services is available to help meet individual customer needs.

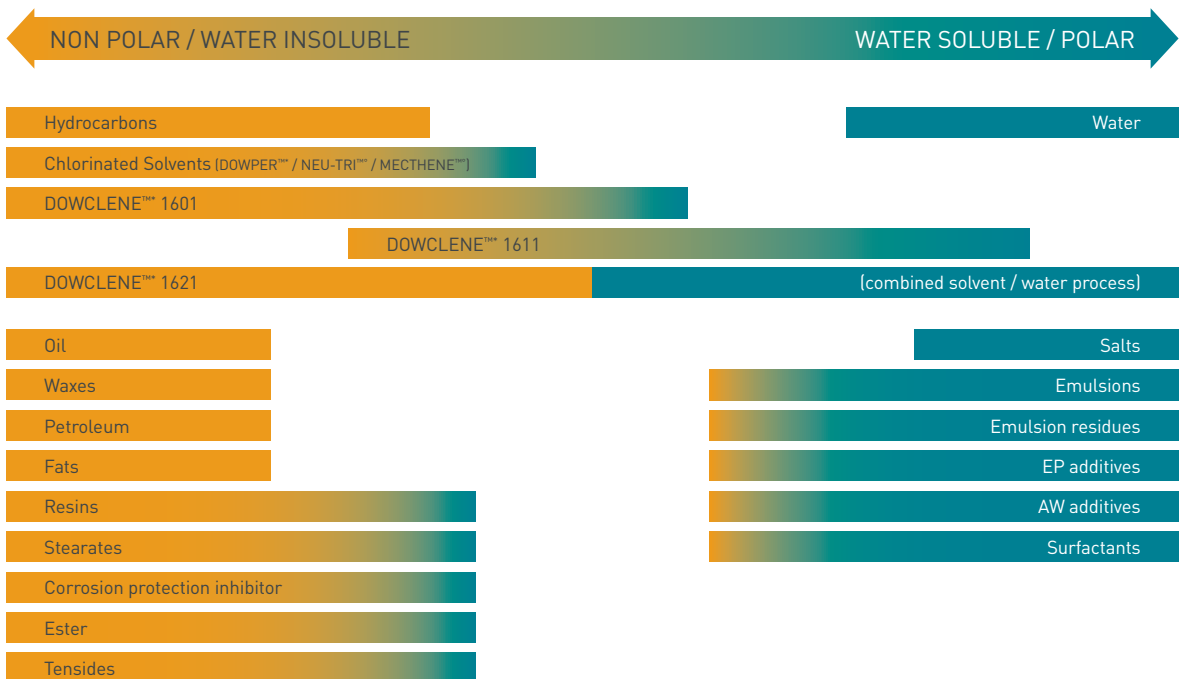
SAFECHEM DELIVERS
A SIGNIFICANTLY HIGHER
CLEANING QUALITY.¹

Franz König,
Schwäbische Härtetechnik

DOWCLENES™ 1601, DOWCLENES™ 1611 and DOWCLENES™ 1621 are virgin, high-performance modified alcohol solvents with excellent cleaning properties. They are suitable for difficult applications such as the cleaning of heat exchangers. DOWCLENES™ 1601 Modified Alcohol Solvent is approved and used by well-known aerospace companies as well as certified by the Fraunhofer Institute to be biocompatible according to DIN ISO 10993-5, 2009¹ for medical cleaning applications.

DOWCLENES™ 16 SERIES PERFORMANCE SPECTRUM

Modified alcohol solvents from the DOWCLENES™ 16 Series have non-polar and polar properties. They are suitable for removing a variety of contaminants. The figure below illustrates the "Equal Solves Equal" principle and the performance spectrum of solvents from the DOWCLENES™ 16 Series.



¹The extract of the metal plates of titanium alloy, Grade 5 Ti-6Al-4V, cleaned with the solvent DOWCLENES™ 1601 was tested non-cytotoxic by the Fraunhofer-Institut für Grenzflächen-und Bioverfahrenstechnik in February 2014.

WHY SHOULD YOU USE DOWCLEN^{TM*} 16 MODIFIED ALCOHOL SOLVENTS?

- DOWCLEN^{TM**} 1601, DOWCLEN^{TM**} 1611 and DOWCLEN^{TM**} 1621 are virgin high-performance grades from SAFECHEM
- DOWCLEN^{TM**} 1601 has a wide range of approvals in the aerospace industry
- DOWCLEN^{TM**} 1601 is certified biocompatible according to DIN ISO 10993-5, 2009¹, and is thus a suitable solvent for use in medical cleaning applications
- With the MAXISTABTM S-Series Stabilizers, SAFECHEM can offer an even more reliable cleaning process in Modified Alcohol Solvents for precision parts cleaning
- SAFECHEM, the pioneer in the field of Modified Alcohol Solvents, provides you with consultancy and services to optimise your cleaning process

¹ The extract of the metal plates of titanium alloy, Grade 5 Ti-6Al-4V, cleaned with the solvent DOWCLENTM 1601 was tested non-cytotoxic by the Fraunhofer-Institut für Grenzflächen- und Bioverfahrenstechnik in February 2014.

Note: The information and data included in this document have been carefully reviewed. However, SAFECHEM does not warrant that any information and data are 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 wilful 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 authorise 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 holds 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.

TM Trademark of SAFECHEM

TM Trademark of The Dow Chemical Company

TM Trademark of Blue Cube LLC

[®] Registered Service Mark of the American Chemistry Council

SAFECHEM EUROPE GMBH

Tersteegenstr. 25

40474 Duesseldorf

Germany

Phone: +49 211 4389-300

Fax: +49 211 4389-389

service@safechem.com

www.safechem.com

