## **TECHNICAL DATA SHEET TWEHA CLEANER+**

version number 4.0 dated August 1, 2023



EC number 29051200

TWEHA Cleaner+ is a toneless neutral universal cleaner and degreaser for the degreasing and cleaning of all surfaces before bonding, sealing or painting.

TWEHA Cleaner+ removes grease, dirt and glue rests (not hardened) fast and safe.

TWEHA Cleaner+ can be safely used for the cleaning of aluminum, wood, synthetic fiber and cemented materials. Does not leave an oily finish and evaporates quickly and fully. It is an ideal tool for finishing glue beads.

Does not affect any material! See the instructions for use for a comprehensive description of the application.

TWEHA Cleaner+ is a solvent for epoxy and acrylic resins. Ethyl cellulose, polyvinyl butyral, alkaloids, gums, shellac, natural resins, and many essential oils. It functions as a latent solvent in solvent systems for nitrocellulose. It is a medium evaporating solvent and is completely miscible with most solvents. Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness. Keep away from heat/sparks/open flames/hot surfaces. Do not smoke. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing. Consult an POISON CENTER or physician if you feel unwell. Consult a physician if eye irritation persists. Store in a well-ventilated place. Keep cool.

## **Typical Properties**

Property	Unit	Method	Value
Purity, min.	%m/m	GC	99.8
Water	%m/m	ASTM D1364	0.03
Acidity (as Acetic Acid)	%m/m	ASTM D1613	0.001
Density at 20°C	kg/l	ASTM D4052	0.785
Specific Gravity at 20°C/20°C	-	ASTM D4052	0.786
Specific Gravity at 25°C/25°C	-	ASTM D4052	0.783
Coefficient of Cubic Expansion at 20°C	10-4/°C	Calculated	11
Refractive Index at 20°C	-	ASTM D1218	1.377
Color	Pt-Co	ASTM D1209	< 5
Boiling Point	°C	-	82
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	1.5
Relative Evaporation Rate (Ether=1)	-	DIN 53170	11
Antoine Constant A #	kPa. °C	-	6.86618
Antoine Constant B #	kPa. °C	-	1360.13
Antoine Constant C # kPa.	°C	-	197.592

## **TECHNICAL DATA SHEET TWEHA CLEANER+**

version number 4.0 dated August 1, 2023

Temperature Limits for Antoine Equation #	°C	-	-10 to +90
Vapor Pressure at 20°C	kPa	Calculated	4.1
Vapor Pressure at 50°C	kPa	Calculated	24
Saturated Vapor Concentration at 20°C	g/m3	Calculated	102
Volatile Organic Compound (VOC)	g/l	EU / EPA	785
Flash Point (Abel)	°C	IP 170	12
Auto Ignition Temperature	°C	ASTM E659	425
Lower Explosion Limit	%v/v	-	2.0
Upper Explosion Limit	%v/v	-	12
Electrical Conductivity at 20°C	pS/m	ASTM D4308	6*106
Dielectric Constant at 20°C	-	-	18.6
Freezing Point	°C	-	- 88
Surface Tension at 20°C	mN/m	-	23
Viscosity at 20°C	mPa.s	-	2.4
Hildebrand Solubility Parameter	(cal/cm3)1/2	-	11.5
Hydrogen Bonding Index	-	-	-16.7
Fractional Polarity	-	-	0.178
Heat of Vaporization at	Tboil kJ/kg	-	664
Heat of Combustion (Net) at 25°C	kJ/kg	-	31000
Specific Heat at 20°C	kJ/kg/°C	-	2.56
Thermal Conductivity at 20°C	W/m/°C	-	0.14
Miscibility at 20°C: Solvent in water	%m/m	-	complete
Miscibility at 20°C: Water in solvent	%m/m	-	complete
Azeotrope with Water: Boiling Point	°C	-	80.3
Azeotrope with Water: Solvent Content	%m/m	-	87.4
Molecular Weight	g/mol	-	60

(#) In the Antoine temperature range, the vapor pressure P (kPa) at temperature T (°C) can be calculated.



All specifications, recommendations and technical data are based on laboratory tests under optimum conditions resp. on practical experience. They have been compiled most carefully. Nevertheless, a claim cannot be derived from them. In view of the wide range and variability of substrates, we would advise that our product should be tested by the user to establish suitability for its intended application. The user bears the only responsibility for non-appropriate or other than specified applications.

We refer to our general Conditions, technical changes reserved. Contents examined and released by TCB, Lepelstraat 1, bus 02.01, B-3290 Lommel, Belgium.

Customer Response Centre: +31 88 999 81 81 or info@tweha.com.