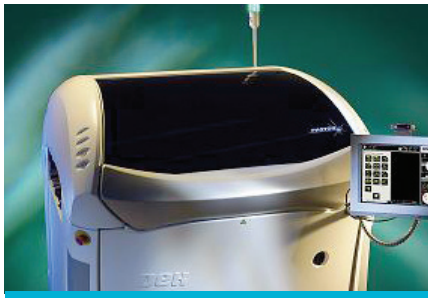
Proton® 23

Proton® 23 is a solvent-based cleaning fluid designed to remove solder paste from print stencils, mainly directly in screen printing machines - DEK, MPM, EKRA, ERSA and others.

Areas for Use of Proton® 23:

1. unsoldered solder paste – PCB misprints and stencils	**highly recommended**	**screen printer**
2. SMD adhesives, uncured	*unrecommended*	
3. lead-free flux residues	*unrecommended*	
4. no-clean flux residues	*unrecommended*	
5. resin fluxing agent residues	*unrecommended*	
6. hardened coatings	*unrecommended*	

Stencil



Screen printer

Cleaning Process Using Proton® 23:

› Proton® 23 is intended for direct use, no need to dilute!
› Pb-free compatible – Proton® 23 is developed also for the cleaning of Pb-free solder pastes.

1.1. unsoldered solder paste – stencils and PCBs´ misprints

Process stages:	*1. cleaning*
Cleaning fluid:	*Proton® 23*
Time (in minutes):	*NA, depend on type of screen printer*
Temperature (°C):	*room temperature*

Proton® 23:

› highly compatible no negative influence on PCBs materials, stencils and components of the cleaning devices;
› suitable for closed cleaning processes;
› easy to use – no need of a special training;
› able to clean also at the room temperature
› tenzide-free technology – no solid residues on the surface being cleaned in comparison with tenzide cleaning fluids being used for these cleaning applications, as well;
› cost-effectiveness of use;

Environmental Information:

› environment-friendly – completely biodegradable;
› HMIS III, evaluation of the overall product hazardousness:
Health - 0 | 1 | 2 | 3 | 4
Flammability - 0 | 1 | 2 | 3 | 4
Reactivity - 0 | 1 | 2 | 3 | 4

HMIS evaluates the product from the three points of view above, the evaluating parameters are from the minimum risk (0) to the maximum one (4); HMIS rating criteria issue national paint and coating associantion NPCA (www.paint.org).

› ROHS – in accordance with the regulations, does not contain any hazardous substances;
› does not contain dangerous halogens.

Physical and Chemical Properties:

Product appearance	*clear*
Odour, aroma	*weak etheric*
Flash point (°C/°F)	*40/104*
pH value	*not determined*
Density (g/ccm) at 20°C (68°F)	*0.90*
Boiling point (°C/°F)	*100 - 150 / 212 - 302*
Freezing point (°C/°F)	*below - 15*
Surface tension (mN/m) at 25°C (77°F)	*27.3*
Vapour pressure (mbar) at 20°C (68°F)	*10.2*
Water solubility at 17°C (62,6°F)	*soluble*

Technical Support:

DCT offers, free of charge, the technical support, consultation and assistance directly on your manufacturing premises to find the most suitable solution.
To book the date of our visit please contact your DCT representative.

Trial Tests:

To book the date of the trial tests please contact your DCT representative.
When setting the cleaning process, DCT offers the testing of cleaning fluids, free of charge, in the full range directly at the customer's, in the amount as needed to fill and run the cleaning technology during the trial test. The duration and range of the trial tests are individual. If the criteria requested are met, the liquid stays with the customer and the partly used cleaning fluid is paid. If the requested cleaning results are not met, DCT takes the used cleaning fluid back without any request for compensation.

Compatibility:

highly compatible - no negative influence on PCBs materials, stencils and components of the cleaning devices.

Liquidation of used Proton® 23:

For the liquidation of Proton® 23 used please contact your company for waste management. While Proton® 23 has been classified as no hazardous product, the substances it contains after the cleaning cycles as the solder pastes, fluxing agents, SMD adhesives etc. are classified as hazardous and Proton® 23 used must be liquidated properly by a responsible company.

Packing:

Proton® 23 is standardly delivered in 25 litres PP cans. Samples are packed individually, should you need a sample, please contact your DCT representative.

Transport:

The preparation is dangerous for the transportation.
Land transport: ADR/RID:

UN No.: 3295
Name and Description: HYDROCARBONS, LIQUID, J.N.
Class: 3
Classification Code: F1
Packaging Group: III
Safety Mark: 3
ID No. of Hazardousnes: 30
Limited amount: LQ7 (excluded from ADR/RID validity for the volume of a single packing up to 5 liters)
Transport Category: 3 (excluded from ADR/RID validity for the amount up to 1,000 kg in a single transport unit)

Handling, Safety at Work:

DCT recommends to the operating staff to use safety spectacles when working with Proton® 23.

Storage:

Proton® 23 does not require any special placement, should be stored in the original packing at the temperature from –5 to 30°C

Shelf life:

The maximum usable life for this product is 24 months from the production date, if stored as recommended.

Decotron® is a registered trademark of DCT Czech
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