

# BELLCLEAN

Sponge like cleanroom wipers -  
for wet cleaning



## Properties:

- Excellent absorbency
- Absolutely lint free – no fibers
- High wear resistance several times usable, washable, economical
- Chemical resistance (look at the table)
- Excellent flexibility – no static charge
- Best particle and dust absorption
- Hard under dry condition, very flexible under wet condition - comfortable

## Physical properties of BELLCLEAN

Material	Polyvinyl, formal resin
Hydrophilic or hydrophobic	Hydrophilic
Pore making method	Particle removal method
Type of pores	Labyrinthal and continuous
Porosity (%)	85-95
Average pore size (μ)	60-2000
Apparent density (g/cm <sup>3</sup> )	0.07-0.12
30% compressive stress (g/cm <sup>2</sup> )	20-120
Tensile strength (kg/cm <sup>2</sup> )	2-9
Tensile elongation (%)	100-300
Abrasion resistance (times before breakage)	1000-2000
Water absorption rate (%)	500 - 1200
Water absorption speed (sec/cm)	2 - 15
Condition when dry	hard
Max. allowable temperature (C°)	wet 60 dry 120
Melting point or decomposition point (C°)	266 JIS method*
Weather resistance	No apparent change with 1000hrs irradiation by a fade-o-meter
Acid resistance	Dissolved by very strong acids
Alkali resistance	Hardened by strong alkalis
Solvent resistance	Weakened with chloroform and dichloroethane
Conditions when burned	No noxious gas

\*These are general properties, not guaranteed ones.

## Chemical resistance of BELLCLEAN

Chemicals	Effect
Sulfuric Acid 5%>	None
Hydrochloric Acid 3%>	None
Nitric Acid 1%>	None
Phosphoric Acid 5%>	None
Acetic Acid 1%>	None
Hydrofluoric Acid 5%>	None
Oxalic Acid 5%>	None
Citric Acid 10%>	None
Hydrogen Peroxide 10%>	None

Sodium Hydroxide 5%>	None
Sodium Hydroxide conc.	Harden
Ammonium Hydroxide 10%>	None
Ammonium Hydroxide conc.	Harden
Methanol 30-90%	Attacked
Ethanol 20-90%	Attacked
Iso-Propanol 10-85%	Attacked
Phenol	Attacked
Ethers	Attacked
Ethyl Acetate	None
Acetone 20-90%	Attacked
Methyl Ethyl Ketone	None
Benzene	None
Toluene	None
Xylene	None
DMF, DMSO	Attacked
Freon	None
Chloroform	Attacked
Trichlorethylene	None
Tetrachlorethylene	Attacked
Tetrahydrofuran	None
Mineral oils	None
Oils and fats	None

**Matters that demand special attention when you use BELLCLEAN with below solvents**

<b>Methanol</b>	You can use it as it is.
<b>Ethanol, Isopropanol, Benzen, Toluene, Xylene, Acetone, Trichlene, Freon</b>	You can use after you soak it in water and wring it and then soak it in a solvent. If it becomes dry, it becomes hard. If you soak it in a solvent as it is dry, it is not softened.
<b>Phenol, DMF-DMSO, Chloroform, Dichlorethane</b>	You can not use.
<b>Methanol solution</b>	You can use. But it might swell, depending on concentration.
<b>Synthetic detergent</b>	You can use except for stock solution of ABS.
<b>Acidity</b>	You can use below 5% concentration.
<b>Alkalinity</b>	You can use below 5% concentration.

<b>Art.-no.:</b>	<b>Description:</b>	<b>Size:</b>	<b>Packaging unit:</b>
RTBCE-1	Wiper E1 (1mm thickness)	23 x 23 cm	10 pcs.
RTBCE-2	Wiper E2 (2mm thickness)	23 x 23 cm	5 pcs.

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