



SIEMENS



SIRIUS ACT

Resistance to chemicals

SIRIUS ACT (3SU1) pushbuttons and indicator lights

Introduction concerning resistance to chemicals

In practice, there are many different applications in which our SIRIUS ACT pushbuttons and indicator lights can be used. Resistance to specific ambient media, such as oils, play a major role when it comes to ensuring that the devices function properly during operation.

To satisfy the diverse requirements of our customers (ambient media) the new SIRIUS ACT pushbuttons and indicator lights are made as standard from highly resistant copolyamide.

There are no restrictions here concerning, for example, labeling of the devices. All devices can still also be labeled customer-specifically by laser.

To help you make a decision for your particular application, we have compiled a table with recommendations for various ambient/environmental conditions and test procedures on the following slides.

SIRIUS ACT (3SU1) pushbuttons and indicator lights

Recommendations for SIRIUS ACT applications

The following data are the result of information gained from internal tests and are provided for your orientation only without any guarantee, as the resistance in the relevant scenario usually depends on a number of influencing factors.

Properties are influenced depending on:

- Composition of the ambient media (amount, concentration)
- Temperature
- Action time
- Stress conditions
- Mechanical load (stress condition)

Please refer to the table for our recommendations.

Medium	Copolyamide
Metalworking oils, oils, greases, waxes	+++
Fuels	+++
Solvents ¹⁾ (print shop, paint shop)	++
Cleaning agents, detergents and disinfectants ¹⁾	++
Acids ¹⁾	++
Caustic solutions ¹⁾	++

¹⁾ Not highly concentrated

+++ highly suitable

++ suitable

+ conditionally suitable

SIRIUS ACT (3SU1) pushbuttons and indicator lights

Test conditions and results of important substance classes

Tests were performed with 10 x user concentration

Medium	Application	User concentration	10 x user concentration	pH value	Active ingredients	Resistance
P3-Oxonia Active 150	Acidic disinfectant	0.08%	0.80%	0	Acetic acid 25-30% hydrogen peroxide in 10-20% solution peracetic acid 10-20%	+++
P3-Topax 66	Disinfectant	5 %	50 %	13.5	Sodium hydroxide 2-5% sodium hypochlorite 2-5% Alkyl amine oxide 2-5%	++
Turbo Mystral	Alkaline intensive cleaner	5 %	50 %	14	Nitrilotriacetic acid <5% ethoxylated coco alkylamine <5% 2-(2-butoxyethoxy)ethanol <5% alkylamine carboxylate Na salt <5% potassium hydroxide solution <1%	+++
Contra Flux	Alkaline cleaner with ethanolamine	10 %	100 %	12.4	2-aminoethanol 9.8 % 2-butoxyethanol 9.9 %, 2-propanol 2.7 %	+++
Hysol RAL-VW	Cooling lubricant	10 %	--	9.2	Neutral amine Carbonic acid 5-10% N-methyldiethanolamine 1-5% 2-ethanolamine 3-7% ethoxylated, unsat. Alcohols 1-5 % (ethylendioxy)dimethanol 1-3%	+++
Omala 220	Gearbox lubricant	100 %	--	Not specified	Mineral oil and additives	+++
Legend:						
+++	= highly suitable					
++	= suitable					
+	= conditionally suitable					
Test conditions:						
Temperature	= room temperature					
Application method	= dipped					
Exposure time	= 14 days					
Concentration 1	= user concentration					
Concentration 2	= 10 x user concentration					