

**Polyethylene (UPE) chemical hoses - for many aggressive chemicals**



**MANICHEM MARBLE**

**Tried and tested hose for acids and alkalis,**  
**antistatic Inner layer:** black and white polyethylene UPE  
**Reinforcement:** synthetic cord, steel spiral  
**Outer layer** Black EPDM rubber  
**Operating temp:** -35°C to +100°C

Robust suction and delivery hose with inner layer of chemically resistant ultra-high molecular weight polyethylene (UPE, UHMWPE), black and white MARBLE type (marbled), smooth, antistatic (R<10<sup>6</sup> Ω). The inner layer is resistant to most acids and bases and many other aggressive chemicals (at elevated, but not very high temperatures), making the hose widely used in the chemical and petrochemical industries. The inner layer made of UPE type MARBLE is furthermore compliant with the requirements for food hoses, and also has a low coefficient of friction during flow and prevents the medium from depositing on the walls. This makes cleaning considerably easier and also allows for use in the cosmetic, pharmaceutical and food industries. Reinforced with synthetic cord and steel spiral. Outer layer made of chemically resistant EPDM rubber, antistatic (R< 10<sup>6</sup> Ω), abrasion, ozone and weather resistant. Compliant with EN 12115:11 (type Ω/T, fully antistatic (R< 10<sup>9</sup> Ω)).  
 - ensures that static electricity is also dissipated through the hose wall, allowing use in all hazardous areas.

**Cleaning (food industry):**

hot water	steam	oxidising acids (peracetic, nitric), hydrogen peroxide (1%)	non-oxidizing acids (phosphoric acid) (5%)	chlorine, sodium hypochlorite (200 ppm)	sodium hydroxide (3%)
95°C / 30 min	130°C / 30 min	max 80°C / 30 min	max 80°C / 30 min	80°C / a few minutes	max 80°C / 30 min

**Standards and requirements:** Chemical hoses: EN 12115:2011(type Ω/T). Food industry, contact with food (inner layer): 1935/2004/EC, 2023/2006/EC (GMP), 10/2011/EU, FDA 21 CFR 177.1520 (c), D.M. 21/03/73. Explosive atmospheres: ATEX directive (zones: 0, 1, 2, 20, 21, 22), EN 50014/ IEC 60079-0.



**Chemical resistance check:** UPE chemical resistance table (pre-selection), confirmation of resistance and conditions of use by Tubes International (especially for temperatures above 50°C).

**Fitting:** use spigot ("tail" to hose) ends that are smooth and do not have sharp or high notches in the UPE inner layer when clamped. The diameter of the spigot should be exactly matched to the diameter of the hose to ensure tightness. Installation with collets or shell clamps.

index	internal diameter [mm]	external diameter [mm]	wall thickness [mm]	working pressure [bar]	Bursting pressure [bar]	vacuum [bar]	bend radius [mm]	mass [kg/m]	Roll length [m]
MT-MANICHEM-M-006	6	16	5	16	64	0,9	42	0,26	40
MT-MANICHEM-M-008	8	20	6	16	64	0,9	56	0,36	40
MT-MANICHEM-M-010	10	20	5	16	64	0,9	70	0,38	40
MT-MANICHEM-M-013	13	23	5	16	64	0,9	85	0,42	40
MT-MANICHEM-M-016	16	28	6	16	64	0,9	112	0,51	40
MT-MANICHEM-M-019	19	31	6	16	64	0,9	125	0,65	40
MT-MANICHEM-M-025	25	37	6	16	64	0,9	150	0,80	40
MT-MANICHEM-M-032	32	44	6	16	64	0,9	175	1,00	40
MT-MANICHEM-M-038	38	51	6,5	16	64	0,9	225	1,30	40
MT-MANICHEM-M-050	50	66	8	16	64	0,9	275	2,20	40
MT-MANICHEM-M-065	63,5	79,5	8	16	64	0,9	300	2,60	40
MT-MANICHEM-M-075	75	91	8	16	64	0,8	350	3,15	40
MT-MANICHEM-M-100	100	118	9	16	64	0,8	450	4,90	40
MT-MANICHEM-M-125	125	146	10,5	12	64	0,8	1000	6,90	40

Note: Indexes highlighted in colour - most commonly used.

