



Established in 2003
NINGBO BODI Seals Co.,Ltd
 Global technical advisor and a leading manufacturer of sealing solutions
 Website: www.bdseals.com

FEP/Silicone FDA EU1935/2004 Materials data sheets

Color: Red
 Hardness: 85-90shore
 Temp: -60°C to 205°C
 Tensile strength: 2800 - 5,000PSI ASTM D-638
 Ultimate elongation: 250 -330% ASTM D-638
 Specifiy gravity: 2.15 ASTM D-792

GAS PERMEABILITY (GM/2540MM²/24HRS BASED ON 40MU FEP):

	23°C	35°C	50°C
CARBON DIOXIDE	NONE	NONE	NONE
HELIUM	NONE	NONE	NONE
HYDROGEN CHLORIDE	NONE	NONE	NONE
NITROGEN	0.18	NONE	NONE
OXYGEN	NONE	NONE	NONE

VAPOUR PERMEABILITY (GM/2540MM²/24HRS BASED ON 40MU FEP):

	23°C	35°C	50°C
ACETIC ACID (ETHANOIC ACID)	NONE	0.42	NONE
ACETONE (ETHANONE)	NONE	0.42	NONE
BENZENE	0.15	0.64	NONE
N-BUTYL ETHER	0.08	NONE	0.65
DECANE	0.72	NONE	1.03
ETHANOL	0.11	0.69	NONE
ETHYL ACETATE (ETHYL ETHANOATE)	0.06	0.77	2.90
HEXANE	NONE	0.57	NONE

HYDROCHLORIC ACID 20%	NONE	NONE	NONE
METHANOL	NONE	NONE	5.61
PIPERIDINE (PENTAMETHYLENEAMINE)	0.04	NONE	NONE
SODIUM HYDROXIDE 50%	NONE	NONE	NONE
SULPHURIC ACID	NONE	NONE	NONE
TETRACHLOROMETHANE	0.11	0.31	NONE
TOLUENE	0.37	NONE	2.93
WATER	0.09	0.45	0.89

ABSORPTION (168HRS AT TEMPERATURE STATED, PFA & FEP):

	TEST TEMP °C	RANGE OF WEIGHT GAIN
ANILINE	185	0.3 TO 0.4%
ACETOPHENONE	201	0.6 TO 0.8%
BENZALDEHYDE	179	0.4 TO 0.5%
BROMINE	22	0.5% (PFA ONLY)
CHLORINE	120	0.5 TO 0.6%
CHLOROSULPHONIC ACID	150	0.7 TO 0.8%
CHROMIC ACID 50%	120	0.01% BOTH
DIMETHYL SULPHOXIDE	190	0.1 TO 0.2%
FERRIC CHLORIDE 25%	100	0.01% BOTH
FREON 113	47	1.2% (PFA ONLY)
HYDROCHLORIC ACID 37%	120	0.01 TO 0.03%
ISO-OCTANE	99	0.7 TO 0.8%
NITROBENZENE	210	0.7 TO 0.9%
PERCHLOROETHYLENE	121	2.0 TO 2.3%
PHOSPHORIC ACID	100	0.01% BOTH
SULPHURYL CHLORIDE	68	1.7 TO 2.7%
TETRACHLOROMETHANE	78	2.3 TO 2.4%
TOLUENE	110	0.7 TO 0.8%
TRIBUTYL PHOSPHATE	200	1.8 TO 2.0%
ZINC CHLORIDE	100	0.01% TO 0.03%

ABSORPTION (LONG TERM AT TEMPERATURE STATED, PFA & FEP):

	TEST TEMP °C	RANGE OF WEIGHT GAIN
ACETONE (ETHANONE)	50	0.4% ON 12 MONTHS
AMMONIUM HYDROXIDE	70	0.1% ON 12 MONTHS
ETHANOL 95%	50	0.01% ON 12 MONTHS

ETHANOL 95%	70	0.01% ON 2 WEEKS
ETHYL ACETATE (ETHYL ETHANOATE)	50	0.7% ON 12 MONTHS
HYDROCHLORIC ACID 10%	70	0.01% ON 12 MONTHS
NITRIC ACID 10%	70	0.1% ON 12 MONTHS
SODIUM HYDROXIDE 10%	70	0.1% ON 12 MONTHS
SULPHURIC ACID30%	70	0.01% ON 12 MONTHS
TETRACHLOROMETHANE	50	1.6% ON 12 MONTHS
TETRACHLOROMETHANE	70	1.9% ON 2 WEEKS
TOLUENE	50	0.6% ON 12 MONTHS
TOLUENE	70	0.6% ON 2 WEEKS