





MARKEZ® Z1205 PERFLUOROELASTOMER

TECHNICAL DATASHEET

GENERAL PURPOSE Z1205 PERFLUOROELASTOMER

Markez Z1205 was developed as a general use perfluoroelastomer with excellent chemical compatibility for a wide range of applications in the chemical and industrial fields.

FEATURES AND BENEFITS

- Wide chemical compatibility. Shows little effect when exposed to a wide range of solvents, acids and other aggressive chemicals.
- One of the most economical compounds in the market.

CHEMICAL COMPATIBILITY

- Acids & Bases
- Solvents
- Alcohols
- Aldehydes
- Amines
- Triethylamine
- Sodium Hydroxide
- Steam/Hot Water
- Chemical & Hydrocarbon **Processing**
- Aromatic/Aliphatic Oils
- Ethers
- Esters
- Ketones
- MEK
- Oxidizers



APPLICATION EXAMPLES

- Chemical sprayers
- Chemical injectors
- Chemical reactors
- Connectors & filters
- Down-hole equipment
- Ink handling equipment
- Instrumentation
- Liquid chromatography equipment
- Mechanical seals
- Painting equipment
- Pumps & Valves

TYPICAL PHYSICAL PROPERTIES

PROPERTIES	ASTM	VALUE
Color		Black
Material Type	FFKM	
Hardness, Shore A	D2240	75
Tensile Strength, MPa (PSI)	D412	18.00 (2,600)
Elongation at Break	D412	190%
Compression Set		
72 hrs. @ 200°C (392 °F)	D395	25%
Minimum Operating Temperature		-7°C (20°F)
Maximum Operating Temperature		230°C (
		450°F)

Markez Z1205 Test Data in Various Environments

Markez Z1205 shows excellent resistance to solvents and a good overall performance in most chemical environments. For added resistance to strong acids, we recommend Markez Z1210 compound.

% Permanent Set, 70 hours at 200°C	25
% Permanent Set, 500 hours at 200°C	31
% Permanent Set, 1,000 hours at 200°C	40
% Permanent Set, 70 hours at 250°C	45
WATER BOMB IMMERSION, ASTM D471, 70 hrs at 200°C	
Volume Change, %	+5.1
volume onange, 70	10.1
STEAM IMMERSION, ASTM D471	
% Volume change, 70 hrs. at 160°C	+2.0
% Volume change, 500 hrs. at 160°C	+3.0
% Volume change, 1000 hrs. at 160°C	+3.0
HEXAMETHYLENE DIAMINE IMMERSION, ASTM D471, 70 hrs at 1 % Volume change	+6.8
% Volume change	
% Volume change ACETONE IMMERSION, ASRM D471, 70 hrs at 23°C % Volume change 20% NITRIC ACID IMMERSION, ASTM D471, 70 hrs at 100°C	+6.8
% Volume change ACETONE IMMERSION, ASRM D471, 70 hrs at 23°C % Volume change 20% NITRIC ACID IMMERSION, ASTM D471, 70 hrs at 100°C % Volume change IMMERSION IN TYPICAL AUTOMOTIVE PAINT SOLVENTS, 70 hrs	+6.8 +0.5 +12.0
% Volume change ACETONE IMMERSION, ASRM D471, 70 hrs at 23°C % Volume change 20% NITRIC ACID IMMERSION, ASTM D471, 70 hrs at 100°C % Volume change IMMERSION IN TYPICAL AUTOMOTIVE PAINT SOLVENTS, 70 hrs Acetone, % Volume change	+6.8 +0.5 +12.0 . at 40°C
% Volume change ACETONE IMMERSION, ASRM D471, 70 hrs at 23°C % Volume change 20% NITRIC ACID IMMERSION, ASTM D471, 70 hrs at 100°C % Volume change IMMERSION IN TYPICAL AUTOMOTIVE PAINT SOLVENTS, 70 hrs Acetone, % Volume change Ethyl Acetate, % Volume change	+6.8 +0.5 +12.0 . at 40°C +4.2 +3.8
% Volume change ACETONE IMMERSION, ASRM D471, 70 hrs at 23°C % Volume change 20% NITRIC ACID IMMERSION, ASTM D471, 70 hrs at 100°C % Volume change MMERSION IN TYPICAL AUTOMOTIVE PAINT SOLVENTS, 70 hrs Acetone, % Volume change Ethyl Acetate, % Volume change Toluene, % Volume change	+6.8 +0.5 +12.0 . at 40°C +4.2 +3.8 +0.4
% Volume change ACETONE IMMERSION, ASRM D471, 70 hrs at 23°C % Volume change 20% NITRIC ACID IMMERSION, ASTM D471, 70 hrs at 100°C % Volume change MMERSION IN TYPICAL AUTOMOTIVE PAINT SOLVENTS, 70 hrs Acetone, % Volume change Ethyl Acetate, % Volume change	+6.8 +0.5 +12.0 . at 40°C +4.2 +3.8

Note: All testing was done on AS568-214 size O-rings

Date: 2016-7-1

TR-10, Degrees C