

EPDM o-rings, or ethylene propylene o-rings, offer lower cost steam and chemical resistance. E1136 is manufactured to meet a variety of industry specifications for drinking water, pharmaceutical, food contact, and other applications.

ABOUT #E1136

E1136 a medical grade material. It is USP Class VI, and FDA compliant per 21 CFR 177.2600. It is NSF 61 compliant for drinking water applications. Compound E1080 is suitable for use in all food contact applications including dry, aqueous and fatty media. EPDM is also generally resistant to ketones, hot and cold water, steam, alkalis, polar solvents, ozone, sunlight, alcohols, glycol engine coolant and Skydrol.

FEATURES

- FDA compliant – CFR21, 177.2600 (e,f)
- USP Class VI
- 3-A Sanitary Standards 18-03 Class 2 compliant
- NSF61 Certified for Drinking Water Applications
- Free from animal derivatives (ADI)
- KTW Certified
- WRAS Certified for water use
- UL 778

APPLICATION EXAMPLES

- Medical applications
- Food applications
- Dairy applications
- Steam applications
- Outdoor weathering applications

ADDITIONAL INFORMATION

- Service Temperature of -65° to 300°F
- Cure System: Peroxide
- Spec: ASTM D 2000 M3 DA 714 A26 B36 C32 EA14 F19 G21

This information is accurate and reliable to the best of our knowledge. However, Marco Rubber makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use.

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	70 +/- 5	70
Color	Black	Black
Tensile Strength, MPa (psi)	14.0 (2030)	17.0 (2466)
Ultimate Elongation, %	150	220
Modulus at 100% elongation, MPa (psi)	----	4.5 (653)
Specific Gravity	----	1.14
HEAT AGING – A26, ASTM D 865 (70 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, max.	10	4
Tensile Strength Change, %, max.	-20	-17
Ultimate Elongation Change, %, max.	-20	-18
COMPRESSION SET – ASTM D 395 Method B	ASTM D2000 Requirements	Typical Test Results
22 hrs. @ 150°C, Permanent Set, %	25	13
22 hrs. @ 125°C, Permanent Set, %	----	9
70 hrs. @ 150°C, Permanent Set, %	----	24
22 hrs. @ 100°C, Permanent Set, %	----	7
70 hrs. @ 100°C, Permanent Set, %	----	10
OZONE RESISTANCE – C32, ASTM D 1171 Method B	ASTM D2000 Requirements	Typical Test Results
No Crack	Pass	Pass
FLUID RESISTENCE, Water – EA14, ASTM D 471 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Volume Change, %	+/- 5	1
LOW TEMPERATURE RESISTANCE – F19, ASTM D 2137 Method A, 9.3.2	ASTM D2000 Requirements	Typical Test Results
Non-brittle after 3 min. @ -55°C	Pass	Pass
TEAR RESISTANCE – G21, ASTM D624	ASTM D2000 Requirements	Typical Test Results
Die C, kN/m, min.	17	30
LOW TEMPERATURE RESISTANCE – TR-10 Test	ASTM D2000 Requirements	Typical Test Results
TR-10 Temperature, °C	----	-42