

AKRON FKM FK1 is well suited for applications where excellent compression set and superior mold release are required. AKRON FKM FK1 can be used for compression and transfer moulding of O-rings, gaskets and seals. The product can be mixed using typical fluoroelastomers compounding ingredients and mixing can be accomplished with two-roll mills or internal mixers. AKRON FKM FK1 operating temperature range is from -10° to 220°C. The product is processed by compression molding.

Synonyms:FKM

Chemical composition: TFE+PMVE+CSM

Cure type:bisphenol A

### Parameters of precompound\*:

| PROPERTIES                                | UNITS             | TYPICAL VALUE | TEST METHOD |
|---|-------------------|---------------|-------------|
| Appearance                                | -                 | Sheets        | -           |
| Mooney viscosity, ML 1+10 @ 121°C / 250°F | MU                | 30-60         | ISO 289-1   |
| Specific gravity                          | g/sm <sup>3</sup> | 2.1           | ISO 2781    |
| T glass transition                        | °C                | -3            | ISO 22768   |

\* These are typical properties and are not to be used for specification purpose.

### Parameters of cured gum\*:

press cure 40min @ 160°C / 320°F; post cure heating to 200°C during 3,5h and to 200°C during 16h; Heating to 260°C during 0,5h and to 260°C during 16h

| PROPERTIES       | UNITS   | TYPICAL VALUE | TEST METHOD |
|------------------|---------|---------------|-------------|
| Tensile strength | MPa     | 15.2          | ASTMD 412   |
| Elongation       | %       | 182           | ASTMD 412   |
| Compression set  | %       | 7.6           | ASTMD 395   |
|                  |         | 8             | ASTMD 395   |
| Hardness         | Shore A | 76            | ASTMD 1418  |

\* Properties of cured rubber are not to be used for specification purpose.

## Compound Formulation:

| FORMULATION          | UNITS | TYPICAL VALUE |
|----------------------|-------|---------------|
| Rubber               | Phr   | 100           |
| Calcium Hydroxide    | Phr   | 6             |
| Mgo                  | Phr   | 3             |
| N-990MT Carbon Black | Phr   | 30            |



### Main application:

Valve gaskets, membranes, pumps, compressors in chemical and oil industries, other industries including paints and coatings, semiconductor applications



### Package:

AKRON FK1 is available in 20kg box



### Safety and Handling:

- Handle in well-ventilated areas;
- Fumes must not be inhaled;
- Eye and skin contact must be avoided. In case of skin and eye contact wash with water immediately and seek medical help;
- Smoking is prohibited;
- Do not use metallic particulate as mixing agent as it can decompose at high temperature;
- Store away from heat, keep in clean and dry area.

Before using perfluoroelastomer please read the Material Safety Data Sheet carefully.

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