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Compound GPlast<sup>\*\*</sup> 230AED-Explosive Decompression Resistant (U2) POLYMER TYPE: Perfluoroelastomer FFKM90 (+/-5°)

## **Physical Properties**

| Property                     | Test     | Units | Typical Values |  |
|------------------------------|----------|-------|----------------|--|
|                              | Method   |       |                |  |
| COLOUR                       |          |       | DI 1           |  |
| COLOUR                       |          |       | Black          |  |
| HARDNESS                     | ISO 48   | °IRHD | 87             |  |
| TENSILE STRENGTH             | ISO 37   | MPa   | 18.7           |  |
| MODULUS @ 50%                | ISO 37   | MPa   | 10.5           |  |
| ELONGATION @ BREAK           | ISO 37   | %     | 99.6           |  |
| TEAR STRENGTH                | ISO 34   | N/mm  | 22.9           |  |
| TR10                         | ISO 2921 | °C    | -9             |  |
| SPECIFIC GRAVITY             | ISO 2781 | g/cm3 | 1.93           |  |
| COMPRESSION SET VALUE IN AIR |          |       |                |  |
| 25% STRAIN – 24HRS @ 204°C   | ISO 815  | %     | 14.8           |  |
|                              |          |       |                |  |

## **Description**

This black rapid gas decompression resistant (RGD) material provides excellent temperature and high-pressure resistance up to +230°C (+446°F) and has similar chemical resistance to that of PTFE but with elastomeric properties comparable to standard fluorocarbon rubbers. Along with all our GPlast™ range, this grade is suitable for use in a wide range of applications where other polymers are not suitable. Do not use any GPlast™ grade with molten alkali metals. Service Temperatures +230°C (+446°F) to -24°C (-11°F).

## Chemical Resistance

1. Suitable, little or no effect. 2. Minor to moderate effect, not maximum resistance. 3. Moderate to severe effect – may be useful in some limited applications. 4. Unsuitable and not recommended – severe effect.

| Chemical Group             | Rating |
|----------------------------|--------|
| Aromatics / Aliphatic Oils | 1      |
| Acids                      | 1      |
| Alkalis                    | 1      |
| Alcohols                   | 1      |
| Aldehydes                  | 1      |
| Amines                     | 1      |
| Amines >70°C               | 2      |
| Ethers                     | 1      |
| Ethylene Oxide             | 1      |
| Esters                     | 1      |
| Ketones                    | 1      |
| Propylene Oxide            | 1      |
| Steam/Hot Water            | 1      |
| Strong Oxidisers           | 1      |

More detailed information available on request.