

# Santoprene™ 8191-55B100

Thermoplastic Vulcanizate

ExxonMobil Chemical

Message:

It is a soft, black, special non-hygroscopic thermoplastic vulcanized elastomer (TPV) in the thermoplastic elastomer (TPE) series. It is specially formulated for bonding with ABS, PS, PC, PMMA, ASA, PET and PPO/PS blends, and is suitable for applications requiring hard/soft material combinations. This brand of Sanduping TPV is a shear rate dependent product that can be processed on conventional thermoplastic injection molding or extrusion molding equipment. This is a polyolefin-based material that can be recycled in the production process.

| General Information |                                                           |
|---------------------|-----------------------------------------------------------|
| UL YellowCard       | E80017-100686680                                          |
| Features            | Shock absorption                                          |
|                     | Recyclable materials                                      |
|                     | Good formability                                          |
|                     | Ozone resistance                                          |
|                     | Good chemical resistance                                  |
|                     | Oil resistance                                            |
| Uses                | Kitchen utensils                                          |
|                     | Large household appliances and small household appliances |
|                     | Electrical appliances                                     |
|                     | Active hinge                                              |
|                     | Home appliance components                                 |
|                     | Frame                                                     |
|                     | Seals                                                     |
|                     | Fatigue elimination supplies                              |
|                     | Parts under the hood of a car                             |
|                     | Application in Automobile Field                           |
|                     | Soft handle                                               |
|                     | Mobile phone                                              |
|                     | Sporting goods                                            |
|                     | Consumer goods application field                          |
|                     | Bonding                                                   |
|                     | Bonding resin                                             |
| RoHS Compliance     | RoHS compliance                                           |
| UL File Number      | E80017                                                    |
| Appearance          | Black                                                     |
| Forms               | Particle                                                  |
| Processing Method   | Multiple injection molding                                |
|                     | Co-extrusion molding                                      |

Injection molding

| Physical                                              | Nominal Value | Unit              | Test Method         |
|-------------------------------------------------------|---------------|-------------------|---------------------|
| Specific Gravity                                      | 1.04          | g/cm <sup>3</sup> | ASTM D792, ISO 1183 |
| Hardness                                              | Nominal Value | Unit              | Test Method         |
| Durometer Hardness (Shaw A, 15 seconds, 23°C, 2.00mm) | 53            |                   | ISO 868             |
| Elastomers                                            | Nominal Value | Unit              | Test Method         |
| Tensile Elongation - Across Flow (Break, 23°C)        | 600           | %                 | ASTM D412, ISO 37   |
| Compression Set                                       |               |                   |                     |
| 125°C, 70 hr <sup>1</sup>                             | 55            | %                 | ASTM D395B          |
| 125°C, 70 hr <sup>2</sup>                             | 55            | %                 | ISO 815             |
| Aging                                                 | Nominal Value | Unit              | Test Method         |
| Change in Tensile Strength in Air                     |               |                   | ASTM D573, ISO 188  |
| 100°C, 168 hr                                         | -28           | %                 | ASTM D573, ISO 188  |
| 125°C, 168 hr                                         | -61           | %                 | ASTM D573, ISO 188  |
| Change in Ultimate Elongation in Air                  |               |                   | ASTM D573, ISO 188  |
| 100°C, 168 hr                                         | -14           | %                 | ASTM D573, ISO 188  |
| 125°C, 168 hr                                         | -70           | %                 | ASTM D573, ISO 188  |
| Change in Durometer Hardness in Air                   |               |                   | ASTM D573, ISO 188  |
| Support a, 100°C, 168 hr                              | -4.0          |                   | ASTM D573, ISO 188  |
| Support a, 125°C, 168 hr                              | 8.0           |                   | ASTM D573, ISO 188  |
| Change in Tensile Strength                            |               |                   | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in 10% hydrochloric acid                | -1.0          | %                 | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in 50% sodium hydroxide                 | 1.0           | %                 | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in 95% ethanol                          | -17           | %                 | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in IRM 903 oil                          | -85           | %                 | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in water                                | 2.0           | %                 | ASTM D471, ISO 1817 |
| Change in Ultimate Elongation                         |               |                   | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in 10% hydrochloric acid                | -9.0          | %                 | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in 50% sodium hydroxide                 | -7.0          | %                 | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in 95% ethanol                          | -3.0          | %                 | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in IRM 903 oil                          | -68           | %                 | ASTM D471, ISO 1817 |
| 23°C, 168 hr, in water                                | -12           | %                 | ASTM D471, ISO 1817 |
| Change in Durometer Hardness                          |               |                   |                     |
| Support A, 23°C, 168 hr, in 10% hydrochloric acid     | 4.0           |                   | ASTM D471           |
| Support A, 23°C, 168 hr, in 50% sodium hydroxide      | 4.0           |                   | ASTM D471           |
| Support A, 23°C, 168 hr, in 95% ethanol               | 2.0           |                   | ASTM D471           |
| Support A, 23°C, 168 hr, in IRM 903 oil               | -33           |                   | ASTM D471           |
| Support A, 23°C, 168 hr, in water                     | 5.0           |                   | ASTM D471, ISO 1817 |

|                                                   |     |          |
|---------------------------------------------------|-----|----------|
| Support A, 23°C, 168 hr, in 10% hydrochloric acid | 4.0 | ISO 1817 |
| Support A, 23°C, 168 hr, in 50% sodium hydroxide  | 4.0 | ISO 1817 |
| Support A, 23°C, 168 hr, in 95% ethanol           | 2.0 | ISO 1817 |
| Support A, 23°C, 168 hr, in IRM 903 oil           | -33 | ISO 1817 |

| Flammability | Nominal Value | Test Method |
|--------------|---------------|-------------|
| Flame Rating |               | UL 94       |
| 1.10 mm      | HB            | UL 94       |
| 3.00 mm      | HB            | UL 94       |

#### Additional Information

如果适用,这是基于扇形浇口注塑成型的平板测试结果.拉伸强度,伸长率和拉伸应力沿垂直流动方向测定 - ISO 1 型,ASTM die C.25% 形变时的永久压缩变形.本产品可能由第三方根据与埃克森美孚公司或其某一关联公司的合同,按照符合 I SO 9001:2008 要求的质量管理体系生产.从埃克森美孚欧洲分支机构直接购买的所有产品都符合 REACH 法规. 对于埃克森美孚未进口至欧洲的产品,用户应自行评估其是否满足 REACH 法规.

#### Legal statement

未经埃克森美孚化工书面允许,这种产品包括其产品名称,不得在任何医疗应用领域予以使用或有关详细的产品监管信息,请联系客户服务.

#### Injection instructions

Santoprene TPV与乙缩醛和PVC不相容.更多关于加工和模具设计的信息,请查阅我们的《注射成型指南》,《可与B100,ABS,PC和PS粘结的TPV》小册子和《Santoprene TPV 8211-55B100的注射成型》技术文献.

#### Extrusion instructions

Santoprene TPV与乙缩醛和PVC不相容.更多关于加工和模具设计的信息,请查阅我们的《挤出成型指南》和《可与B100,ABS,PC和PS粘结的TPV》小册子.

#### NOTE

1. Type 1
2. Type a

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection.All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

