

PRODUCT INFORMATION

ECO-FLEX RTPV

Thermoplastic Rubber

Lawn & Garden Market Bulletin

Features

- Faster cycle times than SBR and PVC wheels
- Lower specific gravity than SBR and PVC
- Insert or Two-shot molding over PP
- Rubber look and feel

- Shore hardness from 45A to 60D
- Good abrasion and fluid resistance
- Recycle content and more easily recyclable after the useful life of the wheel (compatible with PP)

Benefits

- ■ Cost savings
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- ■ More appealing to consumers than PVC wheels; soft, low noise, non-skid
- ■ Broad range of flexibility
- ■ Long-term stability
- ■ "Green" content appeals to consumers; reduces landfill waste and helps the environment

Lawn & Garden Target Applications:

- Lawnmowers: wheels, pedals, grips, anti-skid step pads, mats
- Turf and grounds equipment: wheels, bumpers, grips, anti-skid step pads
- Garden tools/wheelbarrows: wheels, grips



Cost/performance comparison 12" trash can wheel

PROPERTY	VIRGIN SBR	ECO-FLEX
Hardness, Shore A	80	80
Wear Test, 50k Cycles	Pass	Pass
Cold Drop Test, -20 °C	Pass	Pass
Specific Gravity	1.4	1.00
Tread Weight, g	985	240
Cycle Time, Sec	360	40
Scrap Rate, %	15	<1
Finish Wheel Cost, \$ per Wheel	2.87	1.52



ECO-FLEX RTPV typical physical properties

PHYSICAL PROPERTY	ASTM TEST METHOD	SA-45A	SA-55A	SA-65A	SA-75A	SA-85A	SA-40D
Specific Gravity	D-297	1.02	1.02	1.02	1.02	1.02	1.00
Hardness, Shore A	D-2240	45A	55A	65A	75A	85A	40D
Tensile Strength @ Break, MPa psi	D-412	2.0 290	2.8 400	3.8 550	5.0 725	7.9 1150	9.8 1425
100% Modulus, MPa psi	D-412	1.00 145	1.7 250	2.1 310	3.0 435	5.5 804	8.5 1230
Elongation @ Break, %	D-412	620	600	550	550	500	500
Tear Strength Die C, kN/m pli	D-624	14 83	17 98	21 118	26 145	40 227	62 350



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