NEW RUBBER TECHNOLOGIES
Innovating Unique Compounds

MATERIALS COMPOUNDING GUIDE

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For additional company information please see:
www.newrubbertech.com

or call:
519.682.2764
(personnel listing on last page of this guide)

Rubber Particulate and Concentrate Master-batches

1 MORPHOLOGY

De-vulcanized Rubber Particulate (DRP) can be constituted from various rubber waste streams resulting in a compounding ingredient with superior physical property attributes over micronized rubber powders and conventional reclaim products. The material is a free flowing powder but can form conventional slab master-batch at up to 90% concentration. The powder can be added to rubber mixing equipment through loss in weight feeders, conventional batch mixers by use of low melt batch inclusion bags or as a slab concentrate.

De-vulcanized Rubber Particulate (DRP)

Slab Masterbatch Concentrate

2 Tire Derived Materials

2.1 *90% Master-batch Concentrates*:

2.1.1 Whole Passenger Tire Derived

Material: 19010MB

Material displays the following physical properties when compounded to the listed proportions:

	Phr
19010MB	**166**
Zinc Oxide	2
Stearic Acid	1
Sulphur	1.0
CBS	1.0

Physical Properties:

S.G.	1.08-1.10
MV 1+4@100C:	104
R.H.C:	60
Tensile psi	650
Elongation%	225
Duromter A	62

2 Tire Derived Materials

2.1 *90% Master-batch Concentrates*:

2.1.2 Whole Truck Tire Derived

Material: 29010MB

Material displays the following physical properties when compounded to the listed proportions:

	Phr
29010MB	**166**
Zinc Oxide	2
Stearic Acid	1
Sulphur	1.0
CBS	1.0

Physical Properties:

S.G.	1.08-1.10
MV 1+4@100C:	100
R.H.C:	60
Tensile psi	950
Elongation%	300
Duromter A	61

2 Tire Derived Materials

2.1 *90% Master-batch Concentrates*:

2.1.3 Tread Buffings and Peel Derived

Material: 39010MB

Material displays the following physical properties when compounded to the listed proportions:

	Phr
39010MB	**166**
Zinc Oxide	2
Stearic Acid	1
Sulphur	1.0
CBS	1.0

Physical Properties:

S.G.	1.08-1.10
MV 1+4@100C:	96
R.H.C:	60
Tensile psi	1458
Elongation%	350
Duromter A	59

2 Tire Derived Materials

2.2 Free Flowing DRP (Batch Inclusion Bags)

2.2.1 Whole Passenger Tire Derived

Material: 1100 DRP

Material displays the following physical properties when compounded to the listed proportions:

	Phr
SMR- 20	100
N234 CB	45
ZINC OXIDE	2.4
STEARIC ACID	1.5
TMQ	1
6PPD	1
A-60	1.5
1100 DRP	**350**
SULPHUR	1.6
CBS	1.0
Total	505

Physical Properties:

S.G.	1.14-1.16
R.H.C:	60
Tensile psi	1519
Elongation%	273
Duromter A	67

Packaging: 20 pound low melt batch inclusion bags, shrink wrapped skid.

The information provided represents technical advice and is implied to have been performed to known standards. Information is provided as a guideline and does not represent warranty. It is the users responsibility to determine quality in third party transactions.

2 Tire Derived Materials

2.2 Free Flowing DRP (Batch Inclusion Bags)

2.2.2 Whole Truck Tire Derived

Material: 2100 DRP

Material displays the following physical properties when compounded to the listed proportions:

	Phr
SMR- 20	100
N234 CB	45
ZINC OXIDE	2.4
STEARIC ACID	1.5
TMQ	1
6PPD	1
A-60	1.5
2100 DRP	**350**
SULPHUR	1.6
CBS	1.0
	505

Physical Properties:

S.G.	1.14-1.16
R.H.C:	60
Tensile psi	1739
Elongation%	328
Duromter A	66

Packaging: 20 pound low melt batch inclusion bags, shrink wrapped skid.

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2 Tire Derived Materials

2.2 Free Flowing DRP (Batch Inclusion Bags)

2.2.3 Truck Tread Buffings and Peel Derived

Material: 3100 DRP

Material displays the following physical properties when compounded to the listed proportions:

	Phr
SMR- 20	100
N234 CB	45
ZINC OXIDE	2.4
STEARIC ACID	1.5
TMQ	1
6PPD	1
A-60	1.5
3100 DRP	**350**
SULPHUR	1.6
CBS	1.0
	505

Physical Properties:

S.G.	1.14-1.16
R.H.C:	60
Tensile psi	2367
Elongation%	350
Duromter A	67

Packaging: 20 pound low melt batch inclusion bags, shrink wrapped skid.

3 ENGINEERING POLYMERS

3.1 NITRILE RUBBER

3.1.1 Material: 49010MB

Material displays the following physical properties when compounded to the listed proportions:

	Phr
49010MB	**166**
Zinc Oxide	2
Stearic Acid	1
Sulphur	1.0
CBS	1.0

Physical Properties: 6@320F

S.G.	1.2
Tensile psi	1303
Elongation%	242
Durometer A	63

Volume Swell 70hrs@ 158 F Oil #3 18.5%

3 ENGINEERING POLYMERS

3.2 EPDM

3.1.2 Material: 89010MB

Material displays the following physical properties when compounded to the listed proportions:

	Phr
89010MB	**300**
Zinc Oxide	2
Stearic Acid	1
Sulphur	1.0
CBS	1.5
DTDM 80%	0.5

Physical Properties:

S.G.	1.23-1.27
MV 1+4@100C:	121.5
R.H.C:	33
DRP Content %:	90

Tensile psi	808
Elongation%	425
Duromter A	57

4 APPLICATIONS

4.1 OTR RETREAD

4.1.1 **Material:** 33060-01 OTR Retread

Material displays the following physical properties when compounded to the listed proportions:

	Phr
SMR- 20	85
PDB	15
N234 CB	65
ZINC OXIDE	5
STEARIC ACID	1.5
TMQ	2
6PPD	2
A-Oil	10
39010 MB	**75**
SULPHUR	2.1
CBS	1.5
Total	264.1

Physical Properties:

S.G.		1.14-1.16
MV		54.89
Tensile psi	2553	
Elongation%	475	
Duromter A	62	

Post-Consumer Recycled Content: 28%

4 APPLICATIONS

4.1 CONVEYOR COVER STOCK

4.1.2 Material: 22080-01 Conveyor Cover Stock

SBR 1502	75
PBD	25
Zinc Oxide	5
Stearic Acid	1.5
TMQ	2
6PPD	2
N339	100
29010MB	135
Oil	50
Promix 400	5
Suplhur	2.5
CBS	1.5
Total	404.5

Physical Properties: 6@320F

Tensile psi	1505
Elongation%	325
Durometer A	65

Post-Consumer Recycled Content: 33%

4 APPLICATIONS

4.1 LOW COST MATTING COMPOUND

4.1.3 Material: 19010-04 Matting Compound

Material displays the following physical properties when compounded to the listed proportions:

	Phr
Natural Rubber	20
1100 DRP	110
Zinc Oxide	5
Stearic Acid	2.5
CaCO3	30
Oil	25
Promix 400	10
Sulphur	2.0
CBS	1.0
Total	205.5

Physical Properties:

S.G.	1.18-1.20
Tensile psi	650
Elongation%	225
Duromter A	62

Post-Consumer Recycled Content: 54%

5 PERSONNEL

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