

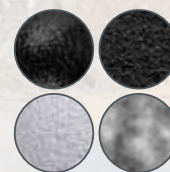
Recovered Carbon Black “EnviroCB™”

Good for the Environment

- » Waste tyres are taken care of in a controlled, closed process (18 Mtons generated every year).
- » The gas generated in the process is used as energy source in the main process.
- » The three remaining output streams: oil, steel and carbon black are sold externally whereof both the steel and the carbon black are used in new products – circular economy. The oil can be used as fuel in industrial engines.
- » Each kilo recovered carbon black used as replacement for virgin means savings of up to 1,5 - 2 kg crude oil.
- » Scandinavian Enviro System is taking one of the largest global waste streams higher up the recycling hierarchy.



THE PYROLYSIS PROCESS



EACH MATERIAL IS EXTRACTED

Good for your Company

- » **Purchasing:** a more stable price picture, less linked to the oil price.
- » **Corporate Social Responsibility:** Increased use of recovered materials and decreased carbon foot print.
- » **Marketing:** “Greener” material source.

PROPERTY	UNIT	TYPICAL VALUE (SWEDISH TYRE MIX FEEDSTOCK)	TEST METHOD
BET Surface Area	m2/g	65-75	ASTM D6556
STSA, Statistical Thickness Surface Area	m2/g	55-60	ASTM D6556
Oil Absorption Number	cm3/100g	90-105	ASTM D2414
Pellets Hardness (average)	g	< 55	ASTM D5230
Pour Density	kg/m3	430-490	ASTM D1513
Sieve Residue, 325 mesh	%	< 0,05	ASTM D1514
pH		6-8	ASTM D1512
Moisture Content	%	< 0,7	ASTM D1509
Ash Content *	%	18-22%	ASTM D1506
Sulfur Content **	%	2,0- 3,0	ASTM D1619

* The ash is mainly made up of SiO₂ and ZnS

** The sulfur is mainly in the form of ZnS which is not active in the vulcanization process



Applications verified

- » Grommets – 100% replacement, Volvo Cars
- » Gasket – 100% replacement, Alvenius
- » Calandered material – 50% replacement
- » Truck bellow – 100 % replacement
- » Rail shock absorbers – 100% replacement
- » Industrial tyres - Asian customer

Recommendations

Recommendations, for using recovered carbon black "EnviroCB™":

- » Works well to combine with virgin CB
- » Works well in EPDM, SBR, NR, NBR.
- » Works well with both sulphur and peroxid vulcanization.

For further assistance on formulations, please contact us.

Production methods

- » Injection moulding
- » Calandring
- » Compression moulding



In Åsensbruk, Sweden, you can find the world's first full scale CFC plant for recovering high quality carbon black.

Contact

For more questions and samples please contact:



Fredrik Olofsson - Sales Manager

+46 (0) 72 323 10 12

fredrik.olofsson@envirosystems.se



Free samples can be provided in small and medium sized containers. Big bag samples for sale.

