



Energy lives here

## PVC powder packaging using Exceed™ XP performance polyethylene-based HDS solutions



Toughness/ stiffness balance



Dart impact



Bag drop performance

Heavy duty sacks (HDS) made with Exceed™ XP performance polyethylene (PE) offer such an excellent toughness/stiffness balance they can replace paper block bottom valve bags (BBVB) and paper-plastic bags used to package PVC powder.

Thanks to Exceed XP performance PE this HDS solution can reduce the risk of PVC powder leakage, while lowering sack costs.

	Paper BBVB	Paper-plastic bag	PE HDS bag
Content	EPVC	SPVC	SPVC, EPVC
Resin leak	•	0	
Bag cost*		0	

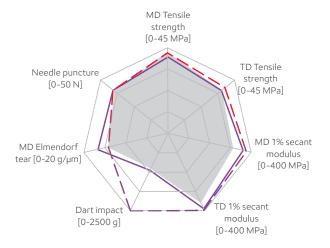
Exceed XP performance PE-based HDS meet market needs better when compared to incumbent paper BBVB and paper-plastic bags.

PVC powder sacks need to expel air quickly during the filling and transportation process, so ventilation holes are required in the gusset of the package.

A 3-layer, 160 micron HDS with ventilation holes, made using Exceed XP and Exceed™ performance polyethylene offers:

- Excellent stiffness/toughness balance to avoid product leakage
- Excellent dart impact
- Good MD tear to protect the bag from tearing
- Cost effective possibilities

<sup>\*</sup>Based on ExxonMobil estimation and open price on 1688.com



	Reference	ExxonMobil 1	ExxonMobil 2
Ratio	1/2/1, 160 μm	1/2/1, 160 µm	1/2/1, 160 μm
Outer		Exceed™ XP 8318 LLDPE	Exceed XP 8318 LDPE
Core	C8 LLDPE C4 LLDPE POE LLDPE	Exceed XP 8318 LLDPE HDPE	Exceed XP 8318 HDPE
Inner		Exceed XP 8318 LLDPE	Exceed XP 8318 Exceed™ 1012 LDPE

All data from tests performed by or on behalf of ExxonMobil

## Bag drop test performance

The bag drop is one of the most critical tests for HDS used to package PVC powder and more challenging than normal HDS packaging because the ventilation holes increase the risk of damage. The Exceed XP performance PE-based HDS with an excellent toughness/stiffness balance demonstrated:

- The Exceed XP 8318 performance PE solution passed the 2-meter bottom bag drop test 3 times
- The Exceed XP 8318 performance PE, and the Exceed XP 8318 performance PE + Exceed 1012 performance PE, solutions passed the 3-meter bottom bag drop test
- No product leakage in the HDS sealing area or the ventilation holes.

Offering excellent bag drop performance due to its extreme mechanical properties, the solution based on Exceed XP 8318 performance PE delivers opportunities to improve bag integrity and reduce costs.

Create innovative, cost-effective HDS for packaging PVC powder with the extreme performance of Exceed XP performance polyethylene.

	MI (g/10 min, 2.16 kg, 190 °C)	Density (g/cm³)
Exceed XP 8358	0.50	0.918
Exceed XP 8318	1.0	0.918
Exceed XP 8784	0.80	0.914
Exceed 1012	1.0	0.912

Data obtained from product data sheets revised May 22, 2018.





Test item	Test method
Density	ExxonMobil Method
Melt Index	ExxonMobil Method
Tensile properties	ExxonMobil Method
Needle puncture	ExxonMobil Method
Elmendorf tear strength	ExxonMobil Method
Bag drop test	ExxonMobil Method
Impact resistance by free-falling Dart : method A and B	ExxonMobil Method

## Why ExxonMobil PE? Why today?

tomorrow's performance today

What some might view as solutions that will only happen in the future, ExxonMobil PE is making possible today – through our innovative and reliable products, collaborative approach, technology leadership and support, and our unmatched global supply and resources.

Why wait for tomorrow to advance your business today? Learn more about how we're helping our customers create innovative solutions now. Contact your ExxonMobil PE representative and begin experiencing tomorrow's performance today in HDS films.



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