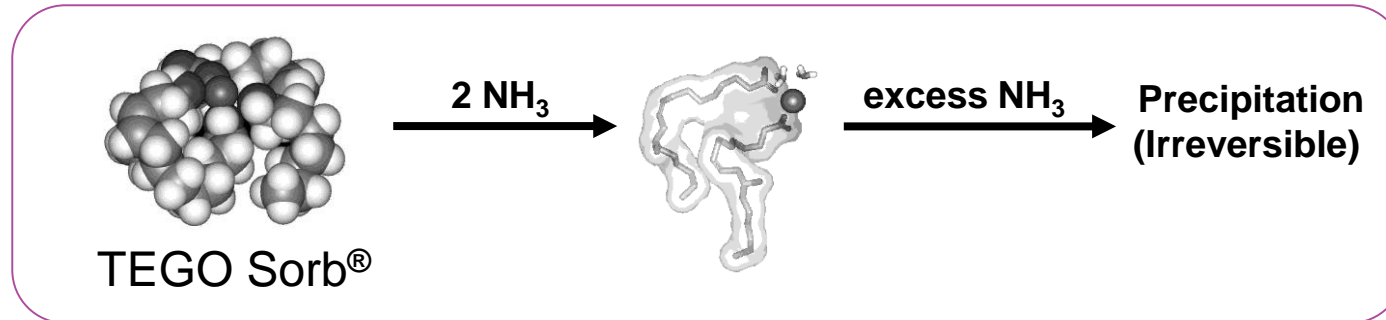


# TEGO Sorb<sup>®</sup>

June 2019

# Malodor Reduction with TEGO Sorb®






TEGO Sorb® permanently removes unpleasant smelling substances based on:

- amines
- sulphur compounds (e.g. thiols, hydrogen sulfide)
- organic acids (e.g. isovaleric acid, butyric acid)

by chemical bonding in the polymer or from the ambient atmosphere; it prevents the emission into the ambient environment.

**TEGO Sorb®** has no effect on hydroxyl or carbonyl groups

# TEGO Sorb® Masterbatches for Recycling

	TEGO Sorb® PY 88 TQ	TEGO Sorb® PY 50 PE TEGO Sorb® PY 50 PP	TEGO Sorb® PY 30 PE TEGO Sorb® PY 30 PP
	100% product	Masterbatch	Masterbatch
Mode of Action	Zinc ricinoleate (key and locker principle)	Zinc ricinoleate	<ol style="list-style-type: none"> <li>1. Zinc ricinoleate</li> <li>2. Promote the evaporation of smelling low molecular weight substances during processing</li> </ol>
Application Examples	Production of masterbatches and compounds	Cast and blown films made from recycled polyolefines	Automotive parts or garden furniture made from recycled polyolefines
Equipment requirements	Compounding systems (e.g. double screw or BUSS kneader)	Suitable for single screw applications	Processing with open vents
Food contact (EC 10/2011, FDA)			

# TEGO Sorb® PY 88 in PA6

The benefits of TEGO Sorb® PY 88 T.Q. can be identified in the following manufacturing steps

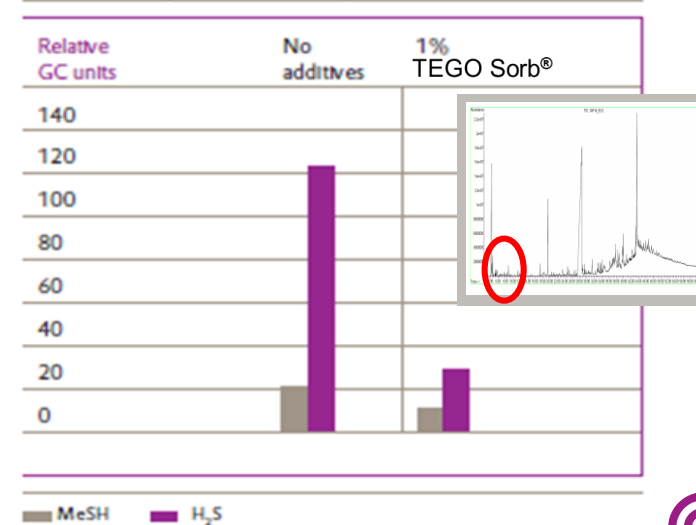
- During Compounding to guarantee an malodor free production
- For reduced odor of the final product
- Especially effective for eliminating odors in recycling of thermoplastics and rubber production



## One Example

- Recycled grade of PA6 containing Mercapto Sulphur components which generate odor
- Addition of 1 % PY 88 leads to reduction of these smelling components by 25 –to 80 %
- characterization of VOC by thermodesorption (GC-MS 90°C) VDA-Norm 278

Figure 19: Reduction of hydrogen sulfide and mercapto methane by TEGO Sorb®



# TEGO Sorb® PY 30 PP/PE

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- Product:
  - Masterbatch of TEGO Sorb® A 30 on PP (60%) / PE (40%) , specifications available
  - 10 kg boxes and 240 kg pallet as standard packaging units
- Price:
  - Can be provided on request by your responsible Evonik sales representative
  - Price-volume brackets available
- Place:
  - Orders for product and samples can be placed with customer service in Essen or in Obernburg
- Promotion:
  - MSDS, TDS and product information on the Website
  - K-Fare will be used for the launch in EMEA

# TEGO Sorb® PY 50 PP/PE

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- Product:
  - Masterbatch of TEGO Sorb® PY 88 on PP / PE , specifications available
  - 10 kg boxes and 240 kg pallet as standard packaging units
- Price:
  - can be provided on request by your responsible Evonik sales representative
  - Price-volume brackets available
- Place:
  - Orders for product and samples can be placed with customer service in Essen or in Obernburg
- Promotion:
  - MSDS, TDS and product information on the Website
  - K-Fare will be used for the launch in EMEA

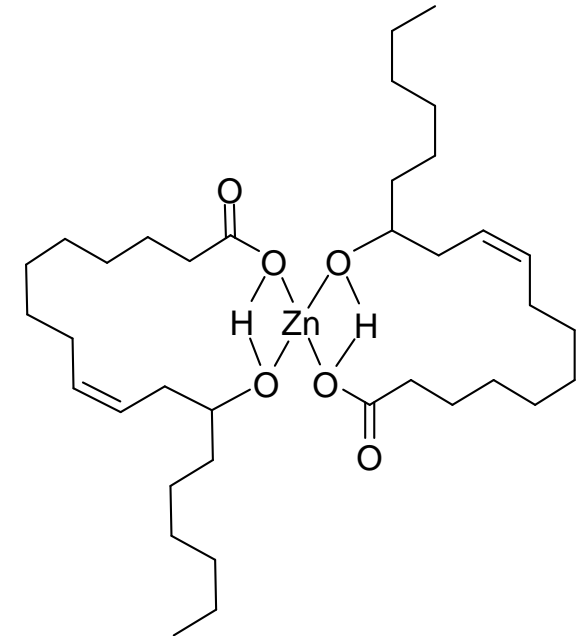
# TEGO Sorb®

## Summary of Benefits

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- TEGO Sorb® Zinc ricinoleate gives superior malodour removal by permanent chemical bonding
- TEGO Sorb® Zinc ricinoleate outperforms due to its
  - fast action
  - permanent effect
- The TEGO Sorb® product range is designed for a wide variety of polymers and production/recycling processes

➤ **Increased value of plastics and rubbers**



# TEGO® Sorb PY 88 T.Q.

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## Conclusion

- **removal of malodor**
- **improved process conditions/environmental**
- **improved odor of recycled material**
- **reduction of odors during processing**
- **reduction of odors for final application**

➤ **increased value of plastic**





**EVONIK**

**POWER TO CREATE**