



Durasorb™

Customer-Tailored Solutions
for Natural Gas Treatment

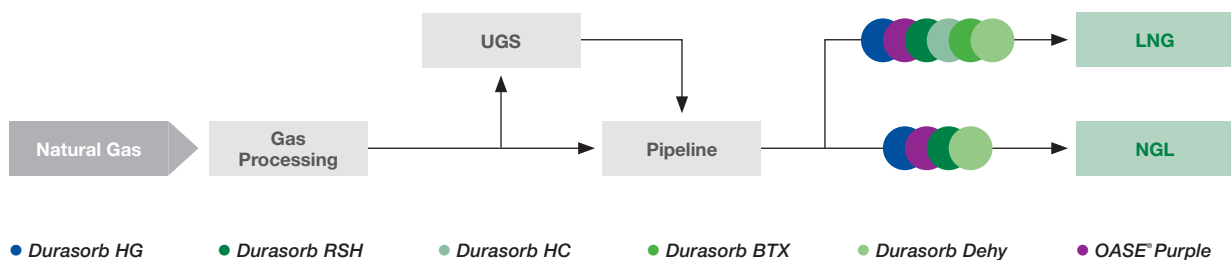
□ · BASF

We create chemistry

Durasorb™ for Natural Gas Treatment

Durasorb is our innovation platform for the natural gas processing industry. Durasorb is a customer-tailored solution that combines superior adsorbents with BASF's expert designs. The new technology uses proprietary design software to calculate the performance of the adsorbents in all parts of the vessel and maximize the overall performance and life of the bed. Based on design calculations, BASF natural gas experts choose the ideal combination of adsorbents out of the comprehensive BASF portfolio. The resulting installation ensures more efficient removal of contaminants and solves regeneration-reflux problems.

Figure 1 BASF Products for Natural Gas Treatment



Based on the long and successful history of BASF Sorbead® for hydrocarbon and water dewpoint control, BASF Durasorb products are designed to work together to provide optimum solutions for the most difficult gas processing conditions, including retrofit of existing units.

Customized Design Combines BASF Products Into a Single Solution

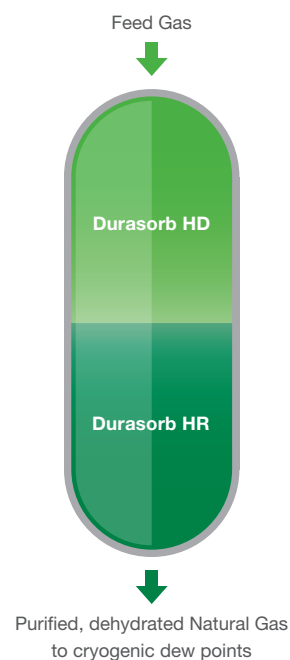
Durasorb Dehy is the combination of two BASF products into a single solution to capitalize on the benefits from each product

- Durasorb HD (High Durability): water resistant adsorbent
- Durasorb HR (High Resistant): reflux resistant molecular sieve

Innovative technology in both the HD and HR layers provide benefits to the plant

- Extended bedlife
- Reduced coking
- Elimination of hydrothermal damage

Durasorb HD is 100% resistant to liquid water and maintains mechanical stability even in liquid water carryover conditions.

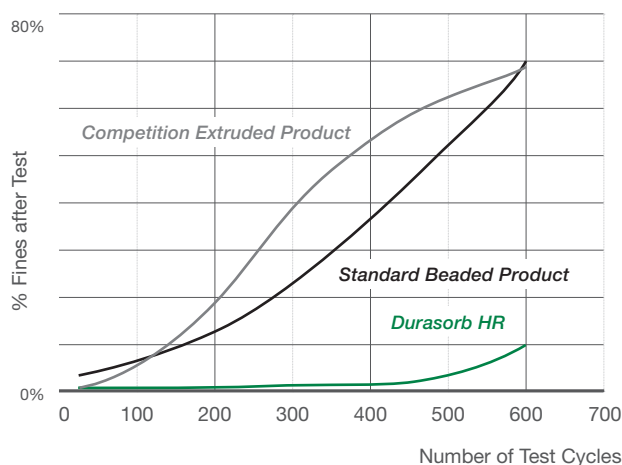


Innovative Technology Solves the Regeneration Reflux Problem

Durasorb HD is resistant to liquid water and maintains mechanical stability, increasing water uptake capacity, resulting in reduced bed size or higher gas throughput. Increased bed lifetime results in higher utilization.

Durasorb HR is developed to withstand harsh conditions found in fast-cycling dehydraters often seen in Liquefied Natural Gas (LNG) applications. This innovative material produces significantly less fines after 600 cycle test.

Figure 2 Durasorb HR Reflux Resistance



BASF Offers the Full Portfolio

● Durasorb HG	→	Non-regenerable, mixed metal oxide adsorbent for Hg levels <0.01 µg/Nm ³
● Durasorb RSH	→	Regenerable adsorbent for mercaptans to ppm levels
● Durasorb HC	→	Regenerable adsorbent for heavy hydrocarbons (C6+) to ppm levels
● Durasorb BTX	→	Regenerable adsorbent for BTX levels <1ppm
● Durasorb Dehy	→	Combination bed design for water dew point control levels <0.1ppm

BASF Natural Gas experts have a diverse portfolio of products to custom design a solution to meet your Natural Gas Treatment needs. Innovative products solve problems at the plant by removing impurities and providing reflux resistance to increase bedlife. Durasorb combined with OASE® Gas Treatment technology, provide the full LNG pre-treatment package.

Support and Services

BASF supports its customers in the design and operation of gas treatment plants by providing process design and engineering support and a range of technical services such as debottlenecking and process optimization, troubleshooting and revamps, analytics, and training. BASF offers tailored solutions and simulations to address specific gas feeds and compositions. Designs are optimized to consider CapEx and OpEx priorities of our customers.



Americas

BASF Corporation
25 Middlesex/Essex Turnpike
Iselin, New Jersey 08830, USA
Tel: +1-732-205-5000
Fax: +1-732-205-5687
Email: catalysts-america@basf.com

Asia Pacific

BASF (China) Company Limited
300 Jiang Xin Sha Road,
Pudong, Shanghai 200137
P.R. China
Tel: +86-21-2039 2549
Fax: +86-21-2039 4800-2549
Email: catalysts-asia@basf.com

Europe, Middle East, Africa

BASF De Meern BV Catalysts
The Netherlands
Tel: +31-30-666 9437
Email: catalysts-europe@basf.com

About Us

BASF's Catalysts division is the world's leading supplier of environmental and process catalysts. The group offers exceptional expertise in the development of technologies that protect the air we breathe, produce the fuels that power our world and ensure efficient production of a wide variety of chemicals, plastics and other products, including advanced battery materials. By leveraging our industry-leading R&D platforms, passion for innovation and deep knowledge of precious and base metals, BASF's Catalysts division develops unique, proprietary solutions that drive customer success.

BASF – We create chemistry

www.catalysts.basf.com/durasorb



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