Durasorb[™]

Customer-Tailored Solutions for Natural Gas Treatment



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.

BASF Offers the Full Portfolio

 Durasorb HG 	 Non-regen
Durasorb RSH	 Regenerab
Durasorb HC	 Regenerab
Durasorb BTX	 Regenerab
Durasorb Dehy	 Combinatio

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

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.



Figure 2 Durasorb HR Reflux Resistance

Number of Test Cycles

herable, mixed metal oxide adsorbent for Hg levels <0.01 $\mu g/Nm^{\scriptscriptstyle 3}$

- ble adsorbent for mercaptans to ppm levels
- ble adsorbent for heavy hydrocarbons (C6+) to ppm levels
- ble adsorbent for BTX levels <1ppm
- ion bed design for water dew point control levels <0.1ppm



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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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