



FDA-HNBR

GENERAL INFORMATION

WCR FDA - HNBR is peroxide cured Hydrogenated Nitrile Rubber, specially developed for high temperature food applications. The material properties are very close to the IND-HNBR with only slightly lower maximum heat and less resistance to sulphides.

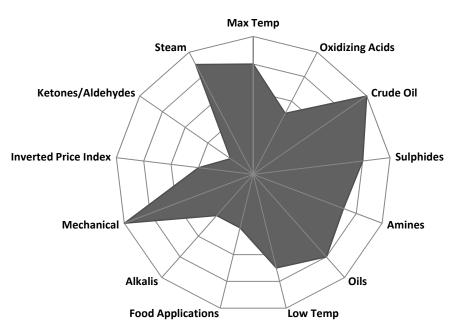
TYPICAL APPLICATIONS

- High temperature "fatty" food applications
- Good replacement for FDA-NBR, where temperature is too high for NBR

TYPICAL PROPERTIES

- Hardness 80 Shore A
- Tensile Strength 21 MPa
- Elongation at break 200%.
- Maximum continuous temperature: 150°C
- FOOD use approved

PROPERTIES OVERVIEW



Notes: The greater distance from the middle, the better.

This is a general overview, in relation to other materials. For specific applications please contact WCR or WCR agents for advice.

MATERIAL SAFETY DATA SHEET (MSDS)

PRODUCT: WCR FDA-HNBR gaskets Edition 2008, Rev. 1



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Trade name: WCR FDA-HNBR Article numbers: 6^{th} & 7^{th} digit = 10 (x x x x x 10) Color Identification: Black rubber gasket with one white and one yellow dot.

2. COMPOSITION/INFORMATION ON INGREDIENTS.

Composition: Hydrogenated Acryonitrile-Butadiene rubber, carbon black, softener, curatives, and antioxidants and processing aids.

3. HAZARD IDENTIFICATION

General Information: Non-labeled product according to US/EU-regulations

Special attention should be paid to the following areas:

- * Particles can cause damage or irritation on the eye surface.
- * Sensitive persons can obtain skin irritation by unprotected handling of the product

4. FIRST-AID MEASURES

Emergency first aid procedures: Eye contact: Flush with water, consult physician. Skin contact: Wash with soap and water. Ingestion: As with swallowing any foreign substance, consult physician.

5. FIRE FIGHTING MEASURES

The material consists of organic raw materials known to be flammable.

In case of fire, follow the instructions given by appropriate fire fighting authorities.

Flammable/Combustible: Yes, at very high temperatures far above 200°C, in presence of an ignition source.

Extinguishing Media: Water spray, high expansion foam or powder.

Special firefighting instructions: Treat as hydrocarbon fire.

Main hazardous combustion products: Carbon dioxide, carbon monoxide, nitrogen oxides, hydrocarbons (alcohols, aldehydes, ketones)

6. ACCIDENTAL RELEASE MEASURES

Waste disposal methods: Dispose of in accordance with local, state and federal regulations

7. HANDLING AND STORAGE Treat as normal rubber products.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection: Only when buffing or at temperatures above 100°C.

Protective gloves: Not normally required at normal use (unless person is especially sensitive to the product)

Eye protection: As required

 $\label{prop:linear} \mbox{Hygienic work practices: Industrial hygiene and safety practices should be observed.}$

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid Odor: Very low

Appearance: Black material with no color coding

Specific gravity: 1,15-1,25 g/ml Free monomers: Traces Melting point: Not applicable

10. STABILITY AND REACTIVITY

Chemical stable: Yes

Hazardous polymerization: Will not occur

- 11. TOXICOLOGICAL INFORMATION: Could cause skin irritation, or allergy, for some very sensitive persons.
- 12. ECOLOGICAL INFORMATION: General Information: The products are very resistant to biodegradability, and not known to be eco-toxic.
- 13. DISPOSAL CONSIDERATIONS: The products may be disposed as land filling, or be burned like other rubber or plastic products.
- 14. TRANSPORT INFORMATION: No special precautions are necessary when transporting the product.
- 15. REGULATORY INFORMATION: No labels are needed. See local and federal regulations.
- 16. OTHER INFORMATION: The product is cured rubber. When exposed to higher temperatures, the lifetime of the product will decrease.

