

CARULITE® 500 GRANULAR CATALYST  
FACT SHEET

CARULITE® 500 catalyst is used to effectively destroy ethylene oxide emissions resulting from sterilization of medical equipment and supplies. The catalyst converts toxic ethylene oxide, at low temperatures, to carbon dioxide and water.

**PARTICLE SIZES AVAILABLE**

8 x 14 mesh granular (2.4 mm x 1.4 mm)

**CHEMICAL/PHYSICAL DATA**

<b>Formula</b>	Manganese dioxide/copper oxide catalyst
<b>Appearance</b>	Black/dark brown granular
<b>Bulk Density</b>	0.7-0.9 g/cc
<b>Surface Area</b>	≥ 200 m <sup>2</sup> /g
<b>Weight Loss</b>	< 3%

**SUGGESTED OPERATING CONDITIONS**

- Minimum operating temperature 300° F (150° C)
- ≤ 10,000 hr<sup>-1</sup> Gas Hourly Space Velocity

**APPLICATIONS**

Commercial sterilizer off-gas  
Hospital sterilizer off-gas

**CATALYST POISONS**

Minimize or avoid contact with: sulfur compounds, halogenated compounds, hydrocarbons, heavy metals, and silica.

**SHIPPING CONTAINERS**

CARULITE 500 catalyst is shipped in 20 kg net weight pails or in 136 kg net weight drums.

**HANDLING, STORAGE, AND INCOMPATIBILITY**

Although CARULITE 500 catalyst is not a hazardous substance, it should be handled with care. Protective equipment in handling should include safety glasses or goggles and rubber or plastic gloves. In cases where high dust exposure may exist, the use of NIOSH-MSHA dust respirator or an air-supplied respirator is advised.

The product should be stored in a cool, dry area in a closed container. Segregate from easily-oxidizable materials, peroxides, chlorates, and acids. Protect container against physical damage. Spillage should be collected and disposed of properly.

**DISPOSAL**

Unused CARULITE 500 catalyst is not considered a hazardous waste under U.S. 40 CFR 261. Dispose of used CARULITE 500 catalyst in a landfill approved to accept chemical waste, after verifying that it is not contaminated with hazardous substances through usage.

**SHIPPING**

CARULITE 500 catalyst is not regulated by the U.S. DOT. CARULITE 500 catalyst is shipped domestically as Class 85 and internationally as HTS Code 3815.90.3000.

Proper Shipping Name: Manganese Dioxide Compound

**CARUS VALUE ADDED****LABORATORY SUPPORT**

Carus has technical assistance available to its potential and current customers to answer questions, evaluate applications alternatives or perform laboratory testing. Our laboratory capabilities include: catalyst analysis, performance testing, process evaluations, and analytical services.

**TECHNICAL SERVICES**

As an integral part of our technical support, Carus provides in-house and on-site assistance. We offer full application services, including technical expertise, design recommendations, and follow-up support.

**CARUS**

For over 100 years, our dedication to research and development, technical support, and customer service has enabled Carus to become the world leader in permanganate, manganese, and catalyst oxidation technologies. Call Carus for assistance with specific applications.