

CARULITE® 300 catalyst is used to effectively destroy carbon monoxide in compressed breathing air, respirators, escape masks, and in cryogenic gas purification.

# PARTICLE SIZES AVAILABLE

4 x 8 mesh granular (4.8 mm x 2.4 mm)

6 x 12 mesh granular (3.35 mm x 1.7 mm)

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

10 x 16 mesh granular (2 mm x 1.2 mm)

12 x 20 mesh granular (1.7 mm x 0.8 mm)

## CHEMICAL/PHYSICAL DATA

Formula Manganese dioxide/copper oxide catalyst

Appearance Black/dark brown granular

**Bulk Density** 0.72-1.0 g/cc**Surface Area**  $\geq 200 \text{ m}^2/\text{g}$ 

Weight Loss < 1%

# SUGGESTED OPERATION CONDITIONS

- Moisture free air (-40° C dew point)
- Vertically-oriented vessel with top-down air flow
- ≤ 15,000 hr -1 Gas Hourly Space Velocity



# **APPLICATIONS**

- Compressed breathing air purification
- Escape masks
- Respirators
- Cyrogenic gas purification

## **CATALYST POISONS**

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

## SHIPPING CONTAINERS

Dependent upon the mesh size required, the CARULITE 300 catalyst is shipped in 20 kg net weight pails or in 114 kg or 136 kg net weight drums.

# **SHIPPING**

CARULITE 300 catalyst is not regulated by the U.S. DOT. CARULITE 300 catalyst is shipped domestically as Class 85 and internationally as HTS Code 3815.90.3000.

Proper Shipping Name: Manganese Dioxide Compound



# HANDLING, STORAGE, & INCOMPATIBILITY

Although CARULITE 300® 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 300 catalyst is not considered a hazardous waste under U.S. 40 CFR 261. Dispose of used CARULITE 300 catalyst in a landfill approved to accept chemical waste, after verifying that it is not contaminated with hazardous substances through usage.

# **CARUS VALUE ADDED**

### **TECHNICAL SUPPORT**

With our CARULITE® catalysts, we provide technical support on how to select the proper catalyst and how to properly use the catalyst to obtain optimal results. We also provide laboratory testing of customer catalyst samples in appropriate cases.

### **CARUS**

During its more than 100 year history, Carus' ongoing emphasis on research and development, technical support, and customer service has enabled the company to become the world leader in permanganate, manganese, oxidation, and base-metal catalyst technologies.



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