CHERNE INDUSTRIES INCORPORATED MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT INFORMATION

Company Address:	5700 Lincoln Drive,		
	Minneapolis, MN 55436 USA		
Telephone Number:	952-933-5501		
Trade Name:	Cherne Smoke Generating Devices		
Chemical Name:	Screening Smoke		
Product Use:	For Sanitary Sewer Testing (Professional Use Only)		

SECTION 2: PRODUCT INGREDIENTS (SMOKE)

Neither TLV nor PEL applicable because product is intended for use in short term tests.

Component	TLV	PEL	8-hour time weighted average
Hydrated Zinc Chloride:	1 mg/m³	1 mg/m³	
Water Condensate:	-	-	
Carbon Monoxide:	55 mg/m³	55 mg/m³	

All other ingredients are present in negligible amounts and/or are non-hazardous.

SECTION 3: PHYSICAL DATA (SMOKE)

Boiling Point: Vapor Pressure: Vapor Density: Solubility in Water: pH: Appearance and Odor: Not Applicable Not Applicable Soluble (Zinc Chloride) No Data Gray to white, with an odor of burning paper

SECTION 4: FIRE & EXPLOSION HAZARD DATA

(SMOKE): Flash Point (method used): Auto Ignition: Flammable limits in air:

None Not Applicable Not Applicable

(SOLID PRODUCT): Extinguishing Media:

Use media suitable for surrounding fire.

(SMOKE / SOLID PRODUCT): Normal fire fighting protective equipment: self-contained breathing apparatus and full protective clothing.

(SMOKE / SOLID PRODUCT): Unusual fire and explosion hazards: No

None Known

SECTION 5: REACTIVITY DATA (SOLID PRODUCT)

Stability: Hazardous decomposition products: Hazardous polymerization: Stable under normal conditions See Section 2 None Known

MATERIAL SAFETY DATA SHEET (continued) SECTION 6: HEALTH HAZARD ASSESSMENT (SMOKE)

General: Cherene Smoke Generating device smoke can be used without hazard if applied as directed. The main effects of the smoke are some irritation of the throat, an awareness of an odd odor, and the appearance of smoke. These effects act as a warning and are desirable to prevent voluntary overexposure. Individuals should be urged not to accept exposures that cause minor irritation, but to leave the area and ventilate well to dissipate the smoke.

- **Ingestion:** Not a significant route of exposure.
- Eye Contact: Acute exposure is not likely to induce eye irritation.
- Skin Absorption: Not a significant route of exposure.
- Inhalation: Acute exposure can cause irritation of the respiratory tract and mucous membranes. In itself irritation is not usually regarded as a toxic effect unless it is sufficient to cause inflammation and then inflammation, not irritation, is the toxic effect.

Effects of Overexposure:

Irritation of the respiratory passages; cough; nausea. Gross overexposure to dense smoke concentrations for periods of ten minutes or more could result in throat irritation and mucous membrane congestion requiring medical treatment. Coughs, chills, fever and pulmonary edema can result from overwhelming exposure. Increasingly severe overexposure is likely to result in increasingly severe irritation and inflammation to all mucous membranes contacted by the smoke with most severe effects usually appearing in the respiratory tract.

SECTION 7: EMERGENCY AND FIRST AID PROCEDURES

Remove victim to fresh air. If breathing is difficult, get medical attention.

SECTION 8: TOXICOLOGICAL PROPERTIES (SMOKE)

Carcinogen listed by: IARC (No) NTP (No) OSHA (No) OTHER (No)

SECTION 9: DISPOSAL METHOD

(SMOKE): Ventilate area. Use local exhaust to keep exposure to a minimum. The duration of smoke would be short and the length of exposure could be reduced further by opening doors and windows for a few minutes, if and when the smoke appears.

(SOLID PRODUCT): Disposal Method: Dispose in chemical disposal area in a manner that complies with local, state and federal regulations.

SECTION 10: PREPARATION OF THE MSDS

The information herein is given in good faith, but no warranty, express or implied, is made. Prepared by: Mark Van Meter, R&D Chemist, Oatey Co. 4700 W. 160th St., Cleveland, OH 44135

Date of Preparation: August 14, 2013 Date of Last Revision: 6/30/2001