

# MATERIAL SAFETY DATA SHEET

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## SECTION 1: PRODUCT INFORMATION

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Product identifier Superior<sup>®</sup> Smoke  
Chemical Name Screening Smoke  
Product Use Superior<sup>®</sup> Smoke for testing sanitary sewers

Manufacturer's information SUPERIOR SIGNAL COMPANY, INC.  
PO Box 96  
Spotswood, NJ 08884 USA  
Emergency Phone # (732) 251-0800  
Fax (732) 251-9442

## SECTION 2: PRODUCT INGREDIENTS (SMOKE)

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

	TLV	PEL	8-hour time weighted average
Hydrated Zinc Chloride	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>	
Water Condensate	-	-	
Carbon Monoxide	55 mg/m <sup>3</sup>	55 mg/m <sup>3</sup>	

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

Concentrations of the various smoke components depend entirely on the size of solid(s) burned, volume of the space and ventilation of the space. They are not independently predictable or knowable.

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Superior<sup>®</sup> Smoke products are available in various sizes that provide sufficient materials to create easily visible smoke at the concentration of 10 mg/m zinc chloride. Superior<sup>®</sup> #1A and #2B are recommended for testing house plumbing. Superior<sup>®</sup> #3C and #W3C are recommended for testing sanitary sewer collection systems.

## SECTION 3: PHYSICAL DATA (SMOKE)

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

## SECTION 4: FIRE & EXPLOSION HAZARD DATA

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(SMOKE): Flash Point (method used): None  
Autoignition: Not Applicable  
Flammable limits in air: Not Applicable

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(SOLID PRODUCT): Extinguishing Media: Use media suitable for surrounding fire.

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

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(SMOKE/SOLID PRODUCT): Unusual fire and explosion hazards: None known

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## SECTION 5: REACTIVITY DATA (SOLID PRODUCT)

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

**SECTION 6: HEALTH HAZARD ASSESSMENT (SMOKE)**

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General: Superior<sup>®</sup> Smoke can be used without hazard if applied as directed. The main effects of the smoke are some minimal 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. Irritation is a warning property of smoke materials; in itself irritation is not usually regarded as a toxic effect unless it is efficient 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**

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

**SECTION 8: TOXICOLOGICAL PROPERTIES (SMOKE)**

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

**SECTION 9: DISPOSAL METHOD**

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(SMOKE): Ventilate area: Use local exhaust to keep exposure to a minimum. The duration of smoke in the house or basement 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.

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The information herein is given in good faith, but no warranty, expressed or implied, is made.

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**SECTION 10: PREPARATION OF THE MSDS**

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