LANXESS
Energizing Chemistry

Sodium o-Phenylphenate

This document provides a brief description of Sodium o-Phenylphenate, its uses, and the potential hazards associated with short and long term exposure. Environmental impact information for accidental releases is included. This information is general in nature and is not intended as a replacement for the safety data sheet (SDS), product label and other safe handling literature. For additional information consult the LANXESS safety data sheet.

Identification

Product Name:	Sodium o-Phenylphenate
Chemical Name:	[1,1'-Biphenyl]-2-ol, sodium salt
Synonym(s):	2-Phenylphenol sodium salt o-Phenylphenate sodium
CAS Number:	132-27-4

Description

Overview: Sodium o-Phenylphenate is a white to off-white organic compound in flake form at ambient temperatures. It is nearly odorless.

Uses: LANXESS Sodium o-Phenylphenate is used as a preservative in the manufacture of glues, adhesives, dyes, pigments, leather, lubricants, textiles, lumber and cement. The chemical is also used as a fungicide in agricultural, lawn and garden products and pet insect repellants.

Properties:

Melting Point:	117 - 266°F (47 - 130°C)
Flash Point:	239°F (115°C)
Solubility in Water:	Soluble
Auto-ignition:	709°F (376°C)

Potential Human Health Effects

Occupational Exposure

Potential for exposure to Sodium o-Phenylphenate exists during manufacture, at transloading, storage and staging areas, and during mixing and sampling operations. A lesser exposure potential exists among workers handling treated produce (e.g. fruit sorting and packing) or products manufactured with Sodium o-Phenylphenate as an ingredient (e.g. metalworking fluids, insecticides, fungicides) since Sodium o-Phenylphenate in these products is regulated and maintained below Environmental Protection Agency maximum occupational exposure (MOE) levels.

Employee Training

Workers handling Sodium o-Phenylphenate are trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. A NIOSH approved powered air-purifying particulate respirator is recommended for transloading, unloading and other operations not contained within a closed system. In addition, LANXESS recommends that goggles, permeation resistant clothing, gloves and foot protection be worn when handling Sodium o-Phenylphenate.

Consumer Exposure

LANXESS Corporation does not sell this product to the general public. LANXESS Sodium o-Phenylphenate in any consumer products manufactured using this chemical is not expected to be present in harmful amounts; e.g., ready-mix concrete.

Short-Term Health Effects

Sodium o-Phenylphenate is corrosive to the skin and eyes and may be highly toxic if inhaled in sufficient quantities. Short-term skin or eye contact may cause redness, swelling or burning of the affected and surrounding tissues. Inhalation of dust may result in irritation or burns to the respiratory tract, with symptoms of coughing, sore throat and runny nose. Ingestion may result in irritation or damage to the digestive system, with symptoms of nausea, vomiting or diarrhea. All methods of exposure may result in headaches, giddiness, nervousness, blurred vision, weakness, cramps or chest pain.

Long-Term Health Effects

Long-term or repeated exposure to Sodium o-Phenylphenate may cause liver or kidney damage. The International Agency for Research on Cancer (IARC) classifies Sodium o-Phenylphenate as Group 2B. This classification indicates sufficient evidence of carcinogenicity in animals after long-term exposure, but inadequate evidence in humans. The Environmental Protection Agency (EPA) does not find Sodium o-Phenylphenate a likely carcinogen.

Physical Hazards

Sodium o-Phenylphenate is corrosive and combustible. Avoid contact with strong acids, oxidizers and reducing agents. Large concentrations of dust may be explosive. Exposure to heat, open flames and other potential sources of ignition must be avoided.

Potential Environmental Impact

An accidental release of Sodium o-Phenylphenate may pose a danger to fish (moderate toxicity), invertebrates (high toxicity) and aquatic plants (moderate toxicity) prior to biodegradation. However, the chemical degrades quickly and is not likely to contaminate surface or ground waters or accumulate in the tissues of aquatic organisms based on its use patterns and environmental fate characteristics. Accidental releases through stack or fugitive air emissions are not expected to be dangerous to the environment.

Conclusion

Under normal conditions of anticipated use as described in this Product Safety Assessment, and if the recommended safe use and handling procedures are followed, Sodium o-Phenylphenate is not expected to pose a significant risk to human health or the environment.

References

IARC Monograph, Supplement 7, International Agency for Research on Cancer

MedlinePlus Medical Encyclopedia, U.S. National Library of Medicine and the National Institutes of Health

Preventol ON Extra Preservative, LANXESS Corporation

Technology Transfer Network Air Toxics Web Site, Environmental Protection Agency (EPA)

Contact Information

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Notices

Use and Application Information