LANXESS
Energizing Chemistry

Sodium Benzoate

This document provides a brief description of Sodium Benzoate, its uses, and the potential hazards associated with short-term 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 material safety data sheet (SDS), product label and other safe handling literature. For additional information consult the LANXESS Corporation safety data sheet.

Identification

Chemical Name:	Sodium Benzoate
Synonym(s):	Benzoate of soda Benzoic acid, sodium salt
CAS Number:	532-32-1

Description

Overview: Sodium Benzoate is sold in solid (crystalline powder) and liquid forms. The compound is white (in solid form) and odorless at ambient temperatures.

Uses: Sodium Benzoate is used as an additive (preservative, pH regulating agent, stabilizer) in the production of many consumer and commercial/ industrial products including adhesive and sealants, plastics, pulp and paper products, automotive coolants, cosmetics, air fresheners, perfumes and fragrances, personal care products (i.e. shampoos, conditioners, facial cleansers and moisturizers), cleaners, paints and coatings, plant protection products and more.

Properties:

Solubility in Water:	Soluble
Boiling Point (liquid):	100°C (212°F)
Melting Point (solid):	436°C (817°F)
Flash Point:	> 93°C (>199°F)

Potential Human Health Effects

Occupational Exposure

Potential for occupational exposure exists during manufacture and in storage, transfer, maintenance and sampling operations at facilities using Sodium Benzoate as an additive in the manufacture of other products. A much lower potential for exposure exists in facilities using the chemical compound in closed manufacturing processes by trained personnel.

Employee Training

Workers should be trained to implement proper handling procedures and to understand the potential health and physical hazards of Sodium Benzoate exposure. If operations generate dust, fumes, gas, vapor or mist, explosion-proof ventilating equipment, process enclosures and other engineering controls should be used to keep worker exposure below any recommended or statutory limits (the OSHA PEL for Particulates Not Otherwise Regulated is 15 mg/m3 - total dust, 5 mg/m3 – respirable fraction. ACGIH recommends 3 mg/m3 - respirable particles and 10 mg/m3 - inhalable particles for Particles Not Otherwise Specified). A NIOSH approved, air-purifying respirator with N-95 filters should be worn if airborne concentration levels are unknown or exceed recommended limits. In addition, LANXESS recommends safety glasses with side-shields and permeation resistant gloves, clothing and footwear be worn when handling Sodium Benzoate.

Consumer Exposure

LANXESS Corporation does not sell Sodium Benzoate to the general public. The chemical compound is approved for use in biocidal products and is an authorized food additive. Consumers may be exposed to trace amounts of Sodium Benzoate via inhalation of ambient air, ingestion of food and drinking water, or contact with consumer products containing the substance.

Short-Term Health Effects

Exposure to Sodium Benzoate may cause severe eye irritation. Symptoms of eye contact include redness, tearing, stinging and swelling. Permanent eye damage is possible. Inhalation of dust may cause mechanical irritation in the respiratory tract.

Long-Term Health Effects

Prolonged or repeated eye contact may cause permanent eye damage.

Physical Hazards

Sodium Benzoate is stable under normal conditions of use. Incompatible materials include oxidizing agents, acids and iron. Dust concentrations may form explosive mixtures in air. Avoid exposure to heat, open flames and other potential sources of ignition. Heating to decomposition may produce carbon dioxide (CO2), carbon monoxide, metal oxides and other toxic/irritating gases or fumes.

Potential Environmental Impact

Sodium Benzoate is readily biodegradable. Degrades rapidly with exposure to air. A release to environmental water sources is unlikely to pose a risk to fish, aquatic invertebrates and aquatic plants because the actual levels of the substance in the receiving water are expected to be much lower than the effective levels indicated in aquatic toxicity studies. Bioaccumulation is not expected.

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 Benzoate is not expected to pose a significant risk to human health or the environment.

References

ECHA InfoCard, Sodium Benzoate, European Chemicals Agency

International Chemical Safety Card, Sodium Benzoate, World Health Organization (WHO) and the International Labour Organization (ILO)

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

PubChem Hazardous Substance Data Bank, Sodium Benzoate, National Library of Medicine, National Center for Biotechnology Information

Safety Data Sheet (SDS), KALAMA® Sodium Benzoate Liquid, LANXESS Corporation

Safety Data Sheet (SDS), KALAMA® Sodium Benzoate Powder NF/FCC, LANXESS Corporation

Contact Information

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Notices

Use and Application Information

The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.