

# 1-Naphthalenamine, N-phenyl-

---

This document provides a brief description of 1-Naphthalenamine, N-phenyl-, 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 Corporation safety data sheet.

## Identification

<b>Chemical Name:</b>	1-Naphthalenamine, N-phenyl-
<b>Synonym(s):</b>	N-Phenyl-1-naphthylamine Phenyl-1-Naphthylamine Phenyl-a-naphthylamine
<b>CAS Number:</b>	90-30-2
<b>Applicable LANXESS Materials:</b>	Additin RC 7130 Rhenofit PAN

## Description

<b>Overview:</b>	1-Naphthalenamine, N-phenyl- is a purple to brown colored solid at ambient temperatures. The material has a slight, aromatic odor.
<b>Uses:</b>	This material, as sold by LANXESS, may be used as an additive for high performance lubricant for the mineral and petroleum industry or as a staining antioxidant for natural and synthetic rubber products.
<b>Properties:</b>	<b>Solubility in Water:</b> 3 mg (20°C); Insoluble <b>Relative density:</b> 1.16 g/cm <sup>3</sup> (20°C) <b>Boiling Point:</b> 335°C (635°F) 558 mm Hg <b>Flash Point:</b> >200°C (>392°F)

## Potential Human Health Effects

### **Occupational Exposure**

Potential for occupational exposure exists during manufacture, and in unloading, storage, staging and transfer operations at facilities using the LANXESS material in the production of other products. A much lower potential for exposure exists in facilities using 1-Naphthalenamine, N-phenyl- in closed manufacturing processes by trained personnel.

### **Employee Training**

Workers handling 1-Naphthalenamine, N-phenyl- should be trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. Process enclosures, local exhaust ventilation, or other engineering controls should be in use to minimize worker exposure. In cases where ventilation is insufficient or airborne concentrations are unknown, a NIOSH approved, air-purifying organic vapor respirator should be used. In addition, it is recommended to use splash proof goggles and permeation resistant gloves, work clothing and foot protection be worn when handling the solid.

### **Consumer Exposure**

LANXESS Corporation does not sell 1-Naphthalenamine, N-phenyl-, nor materials containing the substance, to the general public.

### **Short-Term Health Effects**

1-Naphthalenamine, N-phenyl- is harmful if ingested and may cause symptoms such as abdominal pain, nausea, vomiting, and diarrhea. The organic substance may also cause sensitization by skin contact. Once sensitized, an allergic skin reaction may occur with symptoms including redness, swelling, and rash at low concentrations.

### **Long-Term Health Effects**

Prolonged or repeated exposure via, inhalation, ingestion, or skin contact to 1-Naphthalenamine, N-phenyl- may cause damage to the kidneys and cardiovascular effects. Cardiovascular effects may include methemoglobin formation, resulting in a reduced ability of the blood to carry oxygen. Symptoms may include cyanosis (purplish-blue coloring of the skin, fingernails, and lips).

## **Physical Hazards**

1-Naphthalenamine, N-phenyl- is stable under normal conditions of use. Prevent contact with oxidizing agents, reducing agents, acids, and bases. Avoid extremes of temperature and direct sunlight. Heating to decomposition may release carbon monoxide, carbon dioxide, and nitrogen oxides.

## **Potential Environmental Impact**

This substance is not readily biodegradable. An accidental release to the environment may pose a danger to fish (low toxicity), invertebrates (low toxicity) and other aquatic organisms (low toxicity) prior to degradation.

## **Conclusion**

## 1-Naphthalenamine, N-phenyl-

---

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

## References

*ToxPlanet, N-Penyl-1-naphthylamine, 2018*

*European Chemicals Agency, N-1-naphthylaniline*, December 2018

*Safety Data Sheet (SDS), Additin RC 7130* LANXESS Corporation, January 2019

*Safety Data Sheet (SDS), Rhenofit PAN* LANXESS Deutschland GmbH, January 2019

## Contact Information

LANXESS Corporation, Product Safety & Regulatory Affairs, 111 RIDC Park West Drive, Pittsburgh, PA 15275-1112, USA, Phone 1-800-526-9377 [1-800-LANXESS]

## 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.