

# Iron Oxide Yellow

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This document provides a brief description of Iron Oxide Yellow, 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

<b>Chemical Name:</b>	Iron Oxide Yellow
<b>Synonym(s):</b>	Ferric oxide yellow C.I. Pigment Yellow 42 Yellow iron oxide Bayferrox 920
<b>CAS Number:</b>	51274-00-1

## Description

<b>Overview:</b>	Iron Oxide Yellow is a yellow, odorless, solid powder at 20°C (68°F).						
<b>Uses:</b>	Iron Oxide Yellow is used as a coloring agent in paints, lacquers, varnishes, and polymers industries. It is preferred by construction and coating industries due to its weather resistance, durability, and UV safety.						
<b>Properties:</b>	<table><tr><td><b>Solubility in Water:</b></td><td>Insoluble (1.65 µg/L)</td></tr><tr><td><b>Boiling Point:</b></td><td>&gt; 300°C (572°F)</td></tr><tr><td><b>Melting Point:</b></td><td>260 - 320°C (500 - 608 °F)</td></tr></table>	<b>Solubility in Water:</b>	Insoluble (1.65 µg/L)	<b>Boiling Point:</b>	> 300°C (572°F)	<b>Melting Point:</b>	260 - 320°C (500 - 608 °F)
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### Exposure and Potential Human Health Effects

#### Occupational Exposure

Potential for occupational exposure exists during manufacture and in storage, transfer, maintenance and sampling operations at facilities using Iron Oxide Yellow as an intermediate or 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 Iron Oxide Yellow exposure. Local and general exhaust ventilation should be used to keep worker exposure to airborne contaminants below any recommended or statutory limits. In cases where airborne concentrations are unknown, a NIOSH approved air-purifying respirator with organic vapor cartridges and particulate prefilter should be used to minimize exposure. In addition, LANXESS recommends safety glasses with side shields, impervious gloves and suitable protective clothing be worn when handling Iron Oxide Yellow.

#### Consumer Exposure

LANXESS Corporation does not sell Iron Oxide Yellow to the general public. Consumers may be exposed to trace amounts of Iron Oxide Yellow through use of products manufactured using the substance as an additive or processing aid.

#### Short-Term Health Effects

No acute or chronic oral or dermal effects of Iron Oxide Yellow are expected. The only critical exposure pathway to humans is the inhalation of dust; therefore, it is only necessary to consider this route of exposure as a threshold mode of action for workers.

#### Long-Term Health Effects

No adverse chronic health effects are expected.

### Physical Hazards

Iron Oxide Yellow is stable under normal conditions of use.

### Potential Environmental Impact

Iron Oxide Yellow is not expected to bioaccumulate. An accidental release to environmental water sources may be toxic to aquatic life prior to degradation; however, release according to normal use or regulation-compliant controlled release should have minimal impact on 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, Iron Oxide Yellow is not expected to pose a significant risk to human health or the environment.

### References

*ECHA InfoCard, C.I. Pigment Yellow 42*, European Chemicals Agency

*PubChem*, National Library of Medicine, National Center for Biotechnology Information

### 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.