# Adhesive Products: Modified Rosin Resin

## Overview

Ingevity is a leading global supplier of bio-based tackifying resins for adhesives. Our products have broad compatibility with multiple polymers commonly used in rigid packaging, hygiene, tapes, labels and construction adhesives. Our manufacturing capabilities, logistic services and regional technical support allow us to create innovative adhesive solutions for a broad array of applications.

## Uses and applications

Our modified rosin resin products are highly compatible tackifiers designed to provide better performance over traditional rosin esters in demanding applications.

## Physical/chemical properties

| | |
|---|---|
| Physical state: | Solid. |
| Color: | Amber. |
| Odor: | Bland. |

## Health effects

The information contained in the table below may be useful for individuals who handle the concentrated modified rosin resin substance, such as a manufacturer or transporter. Consumers are not likely to come into contact with the concentrated substance. The data, while verifiable, is not intended to be comprehensive nor replace the data found in the safety data sheet (SDS).

| Effect Assessment | Result |
|---|---|
| Acute toxicity | Virtually nontoxic |
| Eye irritation | Causes serious eye irritation |
| Skin sensitization | May cause an allergic skin reaction |

## Environmental effects

The information contained in the table below is intended to provide brief and general information of this product's environmental impact.

| Effect Assessment | Result |
|---|---|
| Aquatic toxicity | No effects were observed at the highest loading rate tested in any of the acute toxicity studies for fish, Daphnia or algae. |
| Persistence and degradability | Potentially persistent (P), not readily biodegradable |
| Bioaccumulation potential | Low bioaccumulation potential |

## Exposure and risk management recommendations

Ingevity's modified rosin resin is classified as having a potential to cause serious eye irritation and induce and/or elicit skin sensitization. Handling and storage risk management measures that are generally identified for serious eye irritation and skin sensitization are identified below.

*Serious eye irritation*
Avoid direct eye contact with product, also via contamination on hands. Use suitable eye protection. Clean up contamination and/or spills as soon as they occur. Wash off eye contaminants immediately. Provide basic employee training to prevent and/or minimize exposures, and to report any eye effects that may develop.

*Skin sensitization*
Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves if direct hand contact with substance is likely. Clean up contamination and/or spills as soon as they occur. Wash off skin contaminants immediately. Provide basic employee training to prevent and/or minimize exposures, and to report any skin effects that may develop.

Other skin protection measures such as impermeable suits and face shields may be required during high dispersion activities that are likely to lead to substantial aerosol release, *e.g.* spraying.

Additionally, Ingevity's modified rosin resin is classified as combustible dust. This type of product may form combustible dust concentrations in air.

To prevent combustible dust explosion, OSHA recommends manufacturers do the following:

Implement a hazardous dust inspection, testing, housekeeping and control program.

Use proper dust collection systems.

Regularly inspect for dust residues in open and hidden areas.

If ignition sources are present, use cleaning methods that do not generate dust clouds.

Control smoking, open flames and sparks, including mechanical sparks and friction.

## Conclusion

Under conditions of normal use by qualified personnel, Ingevity's modified rosin resin products are not expected to pose a significant risk to human health or the environment.