

**1 . Product and company identification**

**Product name** : INDULIN® 206  
**Material uses** : Asphalt additive  
**Manufacturer** : MeadWestvaco Corporation (www.mwv.com)  
Specialty Chemicals Division  
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North Charleston, South Carolina USA 29406-3615  
Tel: +1 843 740 2236, +1 800 458 4034  
(0800 - 1700 EST)  
email: msds@mwv.com



**Emergency telephone number** : » Tel: +1 800 424 9300 (USA) CHEMTREC

**2 . Hazards identification**

**Physical state** : Liquid.  
**Odor** : Burnt , Oily  
**Color** : Brown. (Dark.)  
**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Emergency overview** : Warning!  
CAUSES EYE AND SKIN IRRITATION.  
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: SKIN, EYE, LENS OR CORNEA.  
CONTAINS MATERIAL WHICH MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: RESPIRATORY TRACT.  
Avoid contact with skin and clothing. Wash thoroughly after handling.

**Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.

**Potential acute health effects**

**Eyes** : Irritating to eyes.  
**Skin** : Irritating to skin.  
**Inhalation** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

**Potential chronic health effects**

**Carcinogenic effects** : No known significant effects or critical hazards.  
**Mutagenic effects** : No known significant effects or critical hazards.  
**Teratogenic effects** : No known significant effects or critical hazards.  
**Target organ effects** : Contains material which causes damage to the following organs: skin, eye, lens or cornea.  
Contains material which may cause damage to the following organs: upper respiratory tract.

**Medical conditions aggravated by over-exposure** : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organ damage.

**Over-exposure signs/symptoms** : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organ damage.

See toxicological information (section 11)

### 3. Composition/information on ingredients

<u>Ingredient name</u>	<u>CAS number</u>	<u>% by weight</u>
Tall oil fatty acid amine condensate	Proprietary **	100

\*\* See Section 15 for HMIRC information.

### 4. First aid measures

<b>Eye contact</b>	: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.
<b>Skin contact</b>	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Inhalation</b>	: Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Ingestion</b>	: Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, small quantities of water to drink may be given under medical supervision. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Protection of first-aiders</b>	: No action shall be taken involving any personal risk or without suitable training.

### 5. Fire fighting measures

<b>Products of combustion</b>	: Emits acrid smoke and irritating fumes when heated to decomposition. These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> etc.).
<b><u>Extinguishing media</u></b>	
<b>Suitable</b>	: Use an extinguishing agent suitable for the surrounding fire.
<b>Not suitable</b>	: None known.
<b>Special exposure hazards</b>	: None.
<b>Explosive properties</b>	: No specific hazard.
<b>Special protective equipment for fire-fighters</b>	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
<b>Special remarks on fire hazards</b>	: Treat as oil fire. Water may cause scattering of the burning liquid and frothing.

### 6. Accidental release measures

<b>Personal precautions</b>	: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
<b>Environmental precautions</b>	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## 6 . Accidental release measures

**Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).

## 7 . Handling and storage

**Handling** : Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.  
**Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area. Store below 60 deg C.

## 8 . Exposure controls/personal protection

**Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

### Personal protection

**Eye/face** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.  
 Recommended: Safety glasses with side shields, safety goggles or face shield.

**Skin** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.  
 >8 hour/hours (breakthrough time): Synthetic or rubber gloves  
 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  
 Body: Recommended: Lab coat, apron or coveralls.

**Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.  
 Recommended: None required. However, use of adequate ventilation is good industrial practice.

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## 9 . Physical and chemical properties

### General information

**Physical state** : Liquid.  
**Color** : Brown. (Dark.)  
**Odor** : Burnt , Oily  
**Flash point** : Closed cup: >232°C (449.6°F). (Pensky-Martens.)

### Important health, safety and environmental information

**pH** : 8.5 (Conc. (% w/w): 15) [Basic.]  
**Boiling/condensation point** : >260°C (500°F)  
**Density** : 0.95 g/cm<sup>3</sup> (7.885 lb(s)/gal)

## 9 . Physical and chemical properties

Specific gravity	: 0.95 (Water = 1)
Volatility	: 0% (w/w)
Evaporation rate	: <1 compared with Ether (anhydrous).

### Other information

Decomposition temperature	: Not available.
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## 10 . Stability and reactivity

Stability	: The product is stable.
Incompatibility with various substances	: Reactive or incompatible with the following materials: oxidizing materials and metals. Avoid aluminum, copper, tin, zinc and their alloys.
Hazardous polymerization	: Will not occur.
Conditions of reactivity	: Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. Treat as oil fire. Water may cause scattering of the burning liquid and frothing.

## 11 . Toxicological information

Target organ effects	: Contains material which causes damage to the following organs: skin, eye, lens or cornea. Contains material which may cause damage to the following organs: upper respiratory tract.
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### Specific effects

Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenicity / Reproductive toxicity	: No known significant effects or critical hazards.
<u>Irritant/Sensitizer</u>	
Ingestion	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Eyes	: Irritating to eyes.
Skin	: Irritating to skin.

## 12 . Ecological information

Environmental precautions	: No known significant effects or critical hazards.
Products of degradation	: These products are carbon oxides (CO, CO <sub>2</sub> ) and water, nitrogen oxides (NO, NO <sub>2</sub> etc.).

## 13 . Disposal considerations

Waste disposal	: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
RCRA classification	: <b>Description:</b> Non-hazardous waste

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

## 13 . Disposal considerations

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
DOT Classification (Bulk)	Not regulated.	-		-		-
IATA-DGR Class	Not regulated.	-		-		-
IMDG Class	Not regulated.	-		-		-

PG\* : Packing group

## 15 . Regulatory information

- HCS Classification** : Irritating material  
Target organ effects
- U.S. Federal regulations** : TSCA §§ 4(a), 4(f), 5(a)(2), 5(e), 6, 8(a), 8(c), 8(d), 12(b): No products were found.  
See "International lists"  
SARA 302/304/311/312 extremely hazardous substances: Not applicable.  
SARA 302/304 emergency planning and notification: Not applicable.  
SARA 302/304/311/312 hazardous chemicals: Not applicable.  
SARA 311/312:  
**Tall oil fatty acid amine condensate:**  
Immediate (acute) health hazard
- State regulations** : No products were found.
- California Prop. 65** : The required chemical analyses and risk assessments were performed on this product. Results indicate that there are no significant risks (or observable effects), as defined by this statute, associated with this product under conditions of normal use.
- Canada**  
Class D-2B: Material causing other toxic effects (Toxic).  
HMIRC - A claim for exemption has been filed: August 16, 2010 - Registry Number 7940.  
Canadian NPRI: No products were found.
- International regulations**
- International lists** : United States: This product and/or its components are TSCA Listed.  
Canada: This product and/or its components is DSL Listed or acceptable under CEPA registration regulations.  
Europe: This product is EINECS listed.  
Australia: This product is AICS listed.  
Japan: This product is MITI Listed.  
China: This product is listed on the Chinese IECSC.  
South Korea: This product is ECL Listed.  
Philippines: Not listed.

**16 . Other information**

<b>HMIS</b> :	Health 1 -	<b>NFPA</b> :	Health 1
	Fire hazard 1		Flammability 1
	Reactivity 0		Instability 0
	Personal protection C		Special

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**Preparation Information** : MeadWestvaco Corporation - Product Stewardship Group  
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