MeadWestvaco

Material Safety Data Sheet
INDULIN® AA-86

1. Product and company identification

Product name : **INDULIN® AA-86**

Material uses : Asphalt emulsifying agent

Manufacturer : MeadWestvaco Corporation
Specialty Chemicals Division
P.O. Box 118005
Charleston, South Carolina USA 29423-8005
Tel: +1 843 740 2236, +1 800 458 4034
(0800 - 1700 EST)
www.MeadWestvaco.com

Responsible Care®
Good Chemistry at Work

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

2. Hazards identification

Physical state : Liquid. (Viscous liquid.)

Color : Amber. (Dark.)

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : Danger!

CAUSES EYE AND SKIN BURNS.
CAUSES SEVERE RESPIRATORY TRACT IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
CAUSES DAMAGE TO THE FOLLOWING ORGANS: RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA.
MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: DIGESTIVE SYSTEM, GASTROINTESTINAL TRACT.

Do not get in eyes or on skin or clothing. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

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

Potential acute health effects

Eyes : Corrosive to eyes.

Skin : Corrosive to the skin. May cause sensitization by skin contact.

Inhalation : Severely irritating to the respiratory system.

Ingestion : May cause burns to mouth, throat and stomach.

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 : Causes damage to the following organs: upper respiratory tract, skin, eye, lens or cornea. May cause damage to the following organs: digestive system, gastrointestinal tract.

Medical conditions aggravated by over-exposure : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. 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 organs damage.

Over-exposure signs/symptoms : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. 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 organs damage.

See toxicological information (section 11)

3 . Composition/information on ingredients

Ingredient name	CAS number	%
Fatty amine derivative	proprietary	100

4 . First aid measures

Eye contact : Get medical attention immediately. 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. Chemical burns must be treated promptly by a physician.

Skin contact : Get medical attention immediately. Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation : Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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.

Ingestion : Get medical attention immediately. 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, give small quantities of water to drink. 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. Chemical burns must be treated promptly by a physician. 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.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.

5 . Fire-fighting measures

Products of combustion : Emits acrid smoke and irritating fumes when heated to decomposition.These products are carbon oxides (CO, CO_2), nitrogen oxides (NO, NO_2 etc.).

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : None.

Explosive properties : No specific hazard.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire hazards : None.

6 . Accidental release measures

Personal precautions : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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 : Do not get in eyes or on skin or clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Wash thoroughly after handling.

Storage : Keep container tightly closed. Keep container in a cool, well-ventilated area.

8 . Exposure controls/personal protection

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants 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 or splash goggles

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): Buna-N or neoprene
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 , safety apron or chemical-resistant protective suit

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: In situations where misting or flying may occur, use appropriate certified respirators.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
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. (Viscous liquid.)
Color	: Amber. (Dark.)
Odor threshold	: Not available.
Flash point	: Closed cup: 126°C (258.8°F).

Important health, safety and environmental information

pH	: 9 to 11 (Conc. (% w/w): 15) [Basic.]
Boiling/condensation point	: >180°C (356°F)
Density	: 0.89 g/cm^3 (7.387 lb(s)/gal)
Specific gravity	: 0.89 (Water = 1)
Volatility	: 0% (w/w)

Other information

Decomposition temperature	: Not available.

10 . Stability and reactivity

Stability	: The product is stable.
Incompatibility with various substances	: Reactive or incompatible with the following materials: oxidizing materials and acids.
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.

11 . Toxicological information

Target organ effects	: Causes damage to the following organs: upper respiratory tract, skin, eye, lens or cornea. May cause damage to the following organs: digestive system, gastrointestinal tract.

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.

Irritant/Sensitizer

Ingestion	: May cause burns to mouth, throat and stomach.
Inhalation	: Severely irritating to the respiratory system.
Eyes	: Corrosive to eyes.
Skin	: Corrosive to the skin. May cause sensitization by skin contact.

12 . Ecological information

Environmental precautions	: No known significant effects or critical hazards.
Products of degradation	: These products are carbon oxides (CO, CO_2) and water, nitrogen oxides (NO, NO_2 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 : **Description:** 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.

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)	UN3267	Corrosive liquid, basic, organic, n.o.s. (Fatty amine derivatives)	8	III		-
IATA-DGR Class	UN3267	Corrosive liquid, basic, organic, n.o.s. (Fatty amine derivatives)	8	III		-
IMDG Class	UN3267	Corrosive liquid, basic, organic, n.o.s. (Fatty amine derivatives)	8	III		-

PG* : Packing group

15 . Regulatory information

HCS Classification : Corrosive material
Sensitizing material
Target organ effects

U.S. Federal regulations : TSCA: No products were found.
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:
Fatty amine derivative:
Immediate (acute) health hazard, Delayed (chronic) health hazard
CERCLA: Hazardous substances.: Ethyl acrylate: 1000 lbs. (453.6 kg);

State regulations : Pennsylvania RTK: Ethyl acrylate: (special hazard, environmental hazard, generic environmental hazard)
Massachusetts RTK: Ethyl acrylate
New Jersey: Ethyl acrylate

California Prop. 65

Ingredient name	Cancer	Reproductive	NSRL	MADL

15 . Regulatory information

Ethyl acrylate	Yes.	No.	No.	No.

Canada

Class D-2B: Material causing other toxic effects (Toxic).
Class E: Corrosive material
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: Not listed.

China: This product is listed on the Chinese IECSC.

South Korea: Not listed.

Philippines: Not listed.

US EPA (TSCA): The hydrochloric salt of this product is only acceptable for use in the production of asphalt emulsions, and the emulsions may only be used in asphalt paving applications.

16 . Other information

HMIS :		NFPA :	
Health	3 *	Health	3
Fire hazard	1	Flammability	1
Reactivity	0	Instability	0
Personal protection	C	Special	

Date of issue : **12/19/2006.**
Date of previous issue : 12/19/2006.
Prepared by : MeadWestvaco Corporation - Product Stewardship Group
Email: msds@MeadWestvaco.com

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

NO WARRANTIES OF USE OR OTHERWISE ARE EXPRESSLY MADE OR IMPLIED FROM THIS INFORMATION. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

The following are registered trademarks (®) of MeadWestvaco Corporation:
AIR PLAS, AQUA NUCHAR, AQUAGUARD, ARMOREZ, ELASTOREZ, HYACT, IMPACT, INDULIN, JONREZ, KRAFTPLEX, KRAFTSPERSE, LIQRENE, LIQRO, MAXCOTE, MEADWESTVACO, MORTAR PLAS, NUCHAR, OPAS, POLYFON, RALUMAC, REAX, STAFOR, TALLEX, TENAX, TRUDOT, WESTREZ, WESTVACO DIACID

The following are trademarks (TM) of MeadWestvaco Corporation:
BIO-NUCHAR, CELLULOSE SOLUTIONS, EMULGATOR, HYATOP, LASERSAFE, MORLIFE, OLEOCHEM, PAVE, PAVEBOND, PERAL, POLYCHEM, POLYFAC, STAFLEX, SURETROPE, SURFSHIELD, SYNPAQUE, ULTRA PLAS, WECOTE

16 . Other information

NA English (US)/ENGLISH.