
SAFETY DATA SHEET

Version 2.2
Revision Date 11.05.2008

MSDS Number 30000009039
Print Date 18.05.2008

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Identification of the substance/preparation : ANCAMIDE[®] 506 Curing Agent

Use of the Substance/Preparation : Curing Agent

Manufacturer/Importer/Distributor : Air Products Chemicals Europe B.V.
Kanaalweg 15, P.O. Box 3193
NL-3502 GD Utrecht
The Netherlands
Tel No. +31(0)30 2857100

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Emergency telephone number (24h) : +44 (0)208 762 8322

2. HAZARDS IDENTIFICATION

Classification

N Dangerous to the environment
C Corrosive

R34 Causes burns.

R43 May cause sensitization by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Emergency Overview

Corrosive
Severe respiratory irritant.
Severe skin irritant.
Severe eye irritant.
May cause sensitization by skin contact.

Potential Health Effects

Inhalation : Harmful if inhaled and may cause delayed lung injury. Inhalation of aerosol may cause irritation to the upper respiratory tract. Risk of serious damage to the lungs (by inhalation). May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Eye contact : Causes eye burns. May cause blindness. Severe eye irritation.

Skin contact : Causes skin burns.

Ingestion : If ingested, severe burns of the mouth and throat, as well as a danger of

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perforation of the oesophagus and the stomach.

- Chronic Health Hazard : This product contains no listed carcinogens according to Directive 67/548/EEC, IARC, ACGIH and/or NTP in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage. Repeated or prolonged contact causes sensitization, asthma and eczemas.
- Aggravated Medical Condition : Asthma.
Eye disease
Skin disorders and Allergies.
- Target Organs : Respiratory system.
Skin.
Eyes.
- Symptoms : Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation : Preparation

Components	EINECS / ELINCS Number	CAS Number	Concentration (Weight)	Classification
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	273-201-6	68953-36-6	> 85%	Xi ; N R41 ; R51/53
3,6,9-Triazaundecamethylenediamine	203-986-2	112-57-2	< 15 %	C ; N R21/22 ; R34 ; R43 ; R51/53

Refer to section 16 for full text of each relevant R-phrase.

CHEMICAL FAMILY: Amidoamine.

4. FIRST AID MEASURES

- General advice : Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
- Eye contact : Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.
- Skin contact : Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.
- Ingestion : If a person vomits when lying on his back, place him in the recovery position. Do not induce vomiting without medical advice. Never give anything by mouth

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- Inhalation : to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side.
- Inhalation : If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam.
Carbon dioxide (CO₂).
Dry chemical.
Dry sand.
Limestone powder.
- Specific hazards : May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Ammonia gas may be liberated at high temperatures. In case of incomplete combustion an increased formation of oxides of nitrogen (NO_x) is to be expected. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.
- Special protective equipment for fire-fighters : Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.
- Further information : Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.
- Environmental precautions : Construct a dike to prevent spreading.
- Methods for cleaning up : Approach suspected leak areas with caution. Contact Air Products' Emergency Response Center for advice. Place in appropriate chemical waste container.
- Additional advice : Open enclosed spaces to outside atmosphere. If possible, stop flow of product.

7. HANDLING AND STORAGE

Handling

Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Avoid contact with skin and eyes. Use only in well-ventilated areas. Avoid breathing vapors and/or aerosols. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage

Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

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Technical measures/Precautions

Do not store in reactive metal containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures

Provide readily accessible eye wash stations and safety showers.
Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Personal protective equipment

- | | |
|---|--|
| Respiratory protection | : Wear appropriate respirator when ventilation is inadequate. |
| Hand protection | : Neoprene gloves.
PVC disposable gloves
Butyl-rubber
Nitrile rubber.
Impervious gloves.
The breakthrough time of the selected glove(s) must be greater than the intended use period. |
| Eye protection | : Full face shield with goggles underneath.
Chemical resistant goggles must be worn. |
| Skin and body protection | : Impervious clothing.
Full rubber suit (rain gear).
Rubber or plastic boots.
Long sleeve shirts and trousers without cuffs. |
| Environmental exposure controls | : Construct a dike to prevent spreading. |
| Special instructions for protection and hygiene | : Discard contaminated leather articles. Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet. |

9. PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|------------------|---|
| Form | : Liquid. |
| Color | : Amber. |
| Odor | : Irritating. |
| Relative density | : 0.95 (water = 1) |
| Vapor pressure | : < 20.68 mmHg at 21 °C |
| Density | : 0.95 g/cm ³ (59.307 lb/ft ³) at 21 °C (70 °F) |
| pH | : Alkaline. |

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Boiling point/range : > 204.44 °C (> 400 °F)
Flash point : 195 °C
Water solubility : Slightly soluble.

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.

Materials to avoid : Sodium hypochlorite.
Organic acids (i.e. acetic acid, citric acid etc.).
Mineral acids.
Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.
Nitrous acid and other nitrosating agents.
Oxidizing agents.

Hazardous decomposition products : Nitric acid.
Ammonia
Nitrogen oxides (NO_x).
Nitrogen oxide can react with water vapors to form corrosive nitric acid.
Carbon monoxide.
Carbon dioxide (CO₂).
Nitrosamine.

11. TOXICOLOGICAL INFORMATION

Acute Health Hazard

Ingestion : LD50 : > 2,000 mg/kg
Species : Rat.
Method : Estimated.

Inhalation : No data is available on the product itself.

Skin. : LD50 : 8,550 mg/kg
Species : Rabbit.

Eye irritation/corrosion : Severe eye irritation.

Acute dermal irritation/corrosion : Severe skin irritation.

Sensitization : May cause sensitization by skin contact. Sensitization has occurred in laboratory animals after repeated exposures.

12. ECOLOGICAL INFORMATION

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Ecotoxicity effects

Aquatic toxicity : No data is available on the product itself.

Toxicity to other organisms : No data available.

Persistence and degradability

Mobility : No data available.

Bioaccumulation : No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products : Contact supplier if guidance is required.

Contaminated packaging : Dispose of container and unused contents in accordance with federal, state, and local requirements.

14. TRANSPORT INFORMATION

ADR

Proper shipping name : TETRAETHYLENEPENTAMINE MIXTURE
Class : 8
UN/ID No. : UN2320
Packing group : III
ADR/RID Hazard ID no. : 80

IATA

Proper shipping name : Tetraethylenepentamine Mixture
Class : 8
UN/ID No. : UN2320
Packing group : III

IMDG

Proper shipping name : TETRAETHYLENEPENTAMINE MIXTURE
Class : 8
UN/ID No. : UN2320
Packing group : III

RID

Proper shipping name : TETRAETHYLENEPENTAMINE MIXTURE
Class : 8
UN/ID No. : UN2320
Packing group : III

Further Information

The transportation information is not intended to convey all specific regulatory data relating to this material. For complete transportation information, contact an Air Products customer service representative.

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15. REGULATORY INFORMATION

Labelling according to EEC Directive

- Hazard symbol : N Dangerous to the environment
C Corrosive
- R-phrases(s) : R34 Causes burns.
R43 May cause sensitization by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S-phrases(s) : S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Country	Regulatory list	Notification
USA	TSCA	Included on Inventory.
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
Canada	DSL	Included on Inventory.
Australia	AICS	Included on Inventory.
Japan	ENCS	Included on Inventory.
South Korea	ECL	Included on Inventory.
China	SEPA	Included on Inventory.
Philippines	PICCS	Included on Inventory.

WGK Identification : 2 - water endangering
Number:

16. OTHER INFORMATION

Ensure all national/local regulations are observed.

R-phrases(s) - Components

R41 Risk of serious damage to eyes.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R21/22 Harmful in contact with skin and if swallowed.
R34 Causes burns.
R43 May cause sensitization by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Prepared by : Air Products and Chemicals, Inc. Global EH&S Product Safety Department

For additional information, please visit our Product Stewardship web site at
<http://www.airproducts.com/productstewardship/>

This Safety Data Sheet has been established in accordance with the applicable European Directives and applies to all countries that have translated the Directives in their national laws.

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Details given in this document are believed to be correct at the time of going to press. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.
