

## Safety Data Sheet edelindustrie Part A

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identification

Name: edelindustrie Part A

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against:

Intended use: Mixture of polyamines in water and selected fillers.

#### 1.3. details of the supplier of the safety data sheet:

edelundstein GmbH  
Einsteinstraße 12  
D-33104 Paderborn  
www.edel-und-stein.com  
info@edel-und-stein.com

#### 1.4. emergency telephone number:

05254/9330731

### 2. IDENTIFICATION OF HAZARDS

#### 2.1 Classification of the substance or mixture:

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet. Hazard classification and indication:

Serious eye damage, category 1 H318

Causes serious eye damage.

Skin sensitization, category 1A H317

May cause an allergic skin reaction.

## 2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Signal words: danger

Symbols:



Warning Hazard statements:

H318

Causes serious eye damage.

H317

May cause an allergic skin reaction.

EUH208

Contains:

4,4'-ISOPROPILIDENEDIFENOLO,  
trietilentetrammina, N-Aminoethyl-  
piperazine

May produce an allergic reaction.

Precautionary Safety instructions.

P272 Contaminated work clothing should not be removed from the work area.  
be let out.

P280 Wear protective gloves/clothing and eye/face protection.

P302+P352 IF ON SKIN: wash with plenty of water / . . .

P310 Immediately call a POISON CENTER / doctor / . . .

Contains:

addotto epossi-amminico tetraetilenpentammina N-Aminoethylpiperazine trietilentetrammina.

## 2.3 Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. substances.

Not applicable.

#### 3.2 Mixtures.

Identification.	Conc. %.	
<b>addotto epossiamminico</b>		
CAS. 260549-92-6	3 – 5	Eye Dam. 1 H318
EC. -		
INDEX. -		
<b>tetraetilenpentammina</b>		
CAS. 112-57-2	0,3 - 0,35	Acute Tox. 4 H302+H312, Acute Tox. 4 H312, Skin Corr. 1B H314, Skin Sens. 1A H317, Aquatic Chronic 2 H411
EC. 203-986-2		
INDEX. 612-060-00-0		
<b>N-Aminoethylpiperazine</b>		
CAS. 140-31-8	0,3 - 0,35	Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Skin Sens. 1 H317, Aquatic Chronic 3 H412
EC. 205-411-0		
INDEX. 612-105-00-4		
<b>trietilentetrammina</b>		
CAS. 112-24-3	0,2 - 0,25	Acute Tox. 4 H312, Skin Corr. 1B H314, Skin Sens. 1 H317, Aquatic Chronic 3 H412
EC. 203-950-6		
INDEX. 612-059-00-5		

#### 4,4'-ISOPROPILIDENEDIFENOLO

CAS. 80-05-7                      0,1 - 0,15      Eye Irrit. 2 H319, Skin Irrit. 2  
H315, STOT SE 3 H335, Skin  
Sens. 1 H317

EC. 201-245-8  
INDEX. –

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures:

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

### 4.2 Most important symptoms and effects, both acute and delayed

For symptoms and effects caused by the contained substances, see chap. 11.

### 4.3. indication of any immediate medical treatment and special care that may be required:

Non-applicable

## 5. FIREFIGHTING MEASURES

### 5.1 Fire extinguishing agents:

#### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

### 5.2 Special hazards arising from the substance or mixture:

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products

### 5.3 Note for firefighters:

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

## **SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## **6. MEASURES IN THE EVENT OF ACCIDENTAL RELEASE**

### **6.1 Personal precautions, protective equipment and emergency procedures:**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### **6.2. Precautions for the environment:**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### **6.3 Methods and material for containment and cleaning:**

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### **6.4 Reference to other sections:**

See also sections 8 and 13.

## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling:**

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

### **7.2. conditions for safe storage, including any incompatibilities:**

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

### **7.3 Specific end use(s):**

Information not available.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTIVE EQUIPMENT**

### **8.1 Control parameters:**

Information not available

### **8.2 Exposure controls and monitoring:**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. When choosing personal protective equipment, ask your chemical substance supplier for advice. Personal protective equipment must be CE marked, showing that it complies with applicable standards. Provide an emergency shower with face and eye wash station.

#### **HAND PROTECTION**

Protect hands with category III work gloves (see standard EN 374). The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### **SKIN PROTECTION**

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### **EYE PROTECTION**

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

#### **RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures

adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited. If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

## ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. information on basic physical and chemical properties:

Appearance	Pasta tissotropica
Colour	neutral
Odour	Ammoniacale
Odour threshold.	Not available.
pH.	ALCALINO
Melting point / freezing point.	Not available.
Initial boiling point.	Not available.
Boiling range.	Not available.
Flash point.	90 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	310,000
Solubility	soluble
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available

### 9.2 Other information

VOC (Directive 1999/13/EC):	0
VOC (volatile carbon):	0

## 10. STABILITY AND REACTIVITY

#### **10.1 Reactivity.**

There are no particular risks of reaction with other substances in normal conditions of use.

#### **10.2 Chemical stability.**

The product is stable in normal conditions of use and storage.

#### **10.3 Possibility of hazardous reactions.**

None

#### **10.4 Conditions to avoid.**

The product is stable in normal conditions of use and storage.

#### **10.5 Incompatible materials.**

None in particular

#### **10.6 Hazardous decomposition products.**

None

### **11. TOXICOLOGICAL INFORMATION**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product. This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration. Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurvies, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase. This product contains sensitizing substance/s and may cause allergic reactions.

trietilentetrammina

LD50 (Oral).2500 mg/kg mouse

LD50 (Dermal).550 mg/kg rabbit

### **12. ECOLOGICAL INFORMATION**



No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil, sewers and waterways. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

### 12.1 Toxicity

addotto eposs-amminico

LC50 - for Fish. > 100 mg/l/96h

EC50 - for Crustacea. > 15 mg/l/48h

### 12.2 Persistence and degradability:

None

### 12.3 Bioaccumulative potential:

N.A.

### 12.4 Mobility in soil:

N.A.

### 12.5 Results of PBT and vPvB assessment:

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### 12.6 Other adverse effects:

Information not available.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods:

Reuse, when possible. Neat product residues should be considered special non-hazardous waste. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

### CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## 14. TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific to the substance or mixture:

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.

Point. 3

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

### 15.2 Chemical safety assessment:

No chemical safety assessment has been processed for the mixture and the substances it contains.

## 16. OTHER INFORMATION

Text of the hazard statements (H) referred to in sections 2-3 of the card:

Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1A	Skin sensitization, category 1A

Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H302+H312	Harmful if swallowed or in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects..

10.5. ADR: European Agreement concerning the carriage of Dangerous goods by Road

10.6. CAS NUMBER: Chemical Abstract Service Number

10.7. CE50: Effective concentration (required to induce a 50% effect)

10.8. CE NUMBER: Identifier in ESIS (European archive of existing substances)

10.9. CLP: EC Regulation 1272/2008

10.10. DNEL: Derived No Effect Level

10.11. EmS: Emergency Schedule

10.12. GHS: Globally Harmonized System of classification and labeling of chemicals

10.13. IATA DGR: International Air Transport Association Dangerous Goods Regulation

10.14. IC50: Immobilization Concentration 50%

10.15. IMDG: International Maritime Code for dangerous goods

10.16. IMO: International Maritime Organization

10.17. INDEX NUMBER: Identifier in Annex VI of CLP

10.18. LC50: Lethal Concentration 50%

10.19. LD50: Lethal dose 50%

10.20. OEL: Occupational Exposure Level

10.21. PBT: Persistent bioaccumulative and toxic as REACH Regulation

10.22. PEC: Predicted environmental Concentration

10.23. PEL: Predicted exposure level

10.24. PNEC: Predicted no effect concentration

10.25. REACH: EC Regulation 1907/2006

10.26. RID: Regulation concerning the international transport of dangerous goods by train

10.27. TLV: Threshold Limit Value

10.28. TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.

10.29. TWA STEL: Short-term exposure limit

10.30. TWA: Time-weighted average exposure limit

10.31. VOC: Volatile organic Compounds

10.32. vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation

10.33. WGK: Water hazard classes (German).

#### GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 453/2010 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament - The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet) - Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition - ECHA website

**Note:** The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses. Provide appointed staff with adequate training on how to use chemical products.