

Printing date:  
15.05.2014

Revision: 16.04.2015

**Trade name: Intenzifikator**

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product Identifier

- **Trade name:** Intenzifikator

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

- **Use of the substance/mixture:** High performance grinding aid used for improving clinker grinding

### 1.3 Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:** ADING AD, Novoselski pat (1409 Str.) No. 11  
1060 Skopje, Republic of Macedonia  
++389 2 2034-800  
+389 2 2034-821, 2034-822  
+389 2 2034-850, 2034-853

### 1.4 Emergency telephone number

- **Emergency telephone number:** Toxicology Information Centre  
+389 2 3147-635

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

*In accordance with the Rulebook on Classification, Labelling and Packaging of Chemicals and Certain Products in line with UN's Globally Harmonised System of Classification and Labelling of Chemicals (Official Gazette of the Republic of Macedonia no. 145/10, 53/11 and 164/13)*

**2.1.1 Classification:** According to Regulation 1272/2008 (CLP)



GHS07

H319 – Causes serious eye irritation (Hazard category 2)

H412 – Harmful to aquatic life with long lasting effects (Hazard category 3)

### 2.2 Label elements

- **Hazard pictogram:** According to Regulation 1272/2008 (CLP)



GHS07

- **Signal word:** Warning

- **H- Hazard statements:** H319- Causes serious eye irritation.  
H412- Harmful to aquatic life with long lasting effects.

**Safety Data Sheet**  
according to 1272/2008/EC

SDS No.142/1

Printing date:  
15.05.2014

Revision: 16.04.2015

**Trade name: Intenzifikator**

- **P- Precautionary statements:** P273- Avoid release to the environment.  
P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **Classification:** According to Directive 67/548/EEC
- **R- Risk statements:** R36- Irritating to eyes.  
R52/53- Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
- **S- Safety statements:** S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S61- Avoid release to the environment.

**2.3 Other hazards**

**PBT and vPvB results:**

PBT: Not applicable.  
vPvB: Not applicable.

### 3. Composition/information on ingredients





**3.1 Substances**

Not applicable.

**3.2 Mixtures**

- **Chemical characterization: Aqueous solution of amine components**

- **Dangerous components:**

Mixture of aliphatic monoamines and diamines		
CAS: 68909-77-3 EINECS: 272-712-1	 Causes serious eye irritation (Hazard category 2), H319 Harmful to aquatic life with long lasting effects (Hazard category 3), H412  Xi, R36, R52/53	< 40%
CAS: 122-20-3 EINECS: 204-528-4	 Causes serious eye irritation (Hazard category 2), H319 Harmful to aquatic life with long lasting effects (Hazard category 3), H412  Xi, R36, R52/53	< 30%

Printing date:  
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Revision: 16.04.2015

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## 4. First aid measures

### 4.1 Description of first aid measures

- **General information:** The general hygiene measures for handling chemicals are to be adhered to when handling this material.
- **After inhalation:** Remove the person to fresh air. Keep the affected person warm and at rest. If not breathing or breathing is difficult, provide artificial respiration. Seek medical advice. Keep the area well ventilated and remove any unnecessary clothing.
- **After skin contact:** Wash continuously with plenty of water. Remove contaminated clothing. If symptoms reappear, seek medical attention. Wash contaminated clothing before reuse.
- **After eye contact:** Rinse out with plenty of water with the eyelid held wide open for several minutes. Remove contact lenses, if present. Continue rinsing in the next 10 minutes. If symptoms persist, seek medical attention.
- **After swallowing:** Rinse mouth with plenty of water. If conscious, give casualty a small quantity of water to drink. Do not induce vomiting. If vomiting occurs, keep head low to prevent asphyxia. Seek medical advice.

### 4.2 Information for doctor

- **Most important symptoms and effects, both acute and delayed** No relevant additional information available.

### 4.3 Indication of any immediate medical attention and special treatment needed

- **Indication of any immediate medical attention and special treatment needed** No relevant additional information available.

## 5. Firefighting measures

### 5.1 Extinguishing media

- **Suitable extinguishing media:** Suitable extinguishing media for surrounding fire should be used. In a fire or if heated, a pressure increase will occur and the container may burst. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any additional risk.

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

- **Special hazards arising from the substance or mixture:** If the product is exposed to high temperature for a longer period of time, it may release CO, CO<sub>2</sub> and nitrogen oxides.

### 5.3 Advice for firefighters

- **Protective equipment:** Suitable protective equipment which contains breathing apparatus.

Printing date:  
15.05.2014

Revision: 16.04.2015

**Trade name: Intenzifikator**

## 6. Accidental release measures

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

- **Personal precautions:** No action shall be taken involving any personal risk. Evacuate surrounding areas. Keep unprotected personnel from entering, if necessary. Do not touch or walk through the spilled material. Ensure suitable personal protection and appropriate ventilation in the room.

### 6.2 Environmental precautions

- **Environmental precautions:** Prevent the material from entering soil, sewers and water courses.

### 6.3 Methods and material for containment and cleaning up

- **Methods for cleaning up:** In case of spillage, collect the spill with suitable tool or absorbent material (sand, earth, vermiculite, diatomaceous earth) and dispose of it in specially marked containers according to local regulations.

## 7. Handling and storage

### 7.1 Precautions for safe handling

- **Precautions for safe handling:** Wear protective clothing and avoid contact with skin and eyes. Do not eat, drink or smoke in areas where the material is stored. Remove contaminated clothing. Ensure appropriate ventilation in the room. Store the material in suitable containers, well-sealed and away from acids.
- **Precautions against fire and explosion:** No special precautions required.

### 7.2 Conditions for safe storage, including any incompatibilities

- **Conditions for storerooms and vessels:** Store in original container protected from direct exposure to sunlight and away from acids. Storage area should be well ventilated.

### 7.3 Specific end use(s)

- **Specific storage conditions** No relevant additional information available.

Printing date:  
15.05.2014

Revision: 16.04.2015

Trade name: **Intenzifikator**

## 8.Exposure controls/personal protection

### 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** No additional information.

### 8.2 Exposure controls and personal protection

- **Exposure controls** If indoors, ensure adequate air ventilation.
- **Personal protective equipment**
- **Respiratory protection:** Appropriate respiratory protection that complies with the prescribed standards.
- **Hand protection:** Chemically resistant protective gloves that comply with the prescribed standards.
- **Eye protection:** Safety glasses that comply with the prescribed standards.
- **Skin protection:** Wear suitable protective clothing.

Printing date:  
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Revision: 16.04.2015

**Trade name: Intenzifikator**

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- **Appearance:**
  - Form:** Liquid
  - Colour:** Brown
- **Odour:** Specific
- **Odour threshold:** Unspecified
- **pH value at t=20°C:** 12 ± 1
- **Melting point/freezing point:** No information available.
- **Boiling point:** No information available.
- **Flash point:** No information available.
- **Evaporation rate:** No information available.
- **Flammability (solid, gas):** No information available.
- **Upper/lower flammability or explosive limits:** No information available.
- **Vapour pressure:** No information available.
- **Vapour density:** No information available.
- **Relative density:** 1.06 ± 0.02 g/cm<sup>3</sup>
- **Solubility:** No information available.
- **Partition coefficient: n-octanol/water:** No information available.
- **Auto-ignition temperature:** No information available.
- **Decomposition temperature:** No information available.
- **Viscosity:** No information available.
- **Explosive properties:** No information available.
- **Oxidising properties:** No information available.

## 10. Stability and reactivity

### 10.1 Reactivity

- No information available.

### 10.2 Chemical stability:

- The product is stable if the guidelines for proper storage and handling are observed.

### 10.3 Possibility of hazardous reactions:

- No information available.

### 10.4 Conditions to avoid:

- No information available.

### 10.5 Incompatible materials:

- Acids.

### 10.6 Hazardous decomposition products:

- When decomposed, it may release: CO, CO<sub>2</sub>, nitrogen oxides.

Printing date:  
15.05.2014

Revision: 16.04.2015

**Trade name: Intenzifikator**

## 11. Toxicological information

### 11.1 Information on toxicological effects

- **Acute toxicity:** /

- **LD/LC50 values relevant for classification:**

*Triisopropanolamine (1,1',1" nitrilotripropan-2-ol )*

Oral	LD50	4000 mg/kg (rat)
Dermal	LD50	10000 mg/kg (rabbit)
<i>Mixture of aliphatic monoamines and diamines</i>		
Oral	LD50	8750 mg/kg (rat)
Dermal	LD50	3850 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin** May cause skin irritation.
- **on the eye** Causes eye irritation.
- **Sensitization:** May cause skin and eye sensitization.

## 12. Ecological information

### 12.1 Toxicity:

#### 12.1.1 Aquatic toxicity:

- The product may be toxic to aquatic organisms.

#### 12.2 Persistence and degradability:

- The product contains biodegradable components.

#### 12.3 Bioaccumulative potential:

- No relevant information available.

#### 12.4 Mobility in soil:

- The product is soluble in water and may move, that is, spread away from the area of release.

#### 12.5 Results of PBT and vPvB assessment:

- No information available.

#### 12.6 Other adverse effects:

- No information available.

## 13. Disposal considerations

### 13.1 Waste treatment methods

**Product waste should be treated in accordance with the Law on Waste Management (Official Gazette of the Republic of Macedonia no. 100/2005, 2/2011, 123/2012, 147/2013), whereas used packaging should be treated in accordance with the Law on Management of Packaging and Packaging Waste (Official Gazette of the Republic of Macedonia no. 161/2001, 136/2011, 39/2012)**

- **Recommendation:** Dispose of waste in accordance with local regulations.
- **Uncleaned packaging**
- **Recommendation:** Used packaging may be reused for the same product. Used packaging may not be reused for storage of drinking water and food. Waste packaging can be passed on for recycling after being thoroughly cleaned.

Printing date:  
15.05.2014

Revision: 16.04.2015

**Trade name: Intenzifikator****14. Transport information****14.1 UN number**

- ADR, ADN, IMDG, IATA – No information available.

**14.2 UN proper shipping name**

- ADR, ADN, IMDG, IATA – No information available.

**14.3 Transport hazard class**

- ADR, ADN, IMDG, IATA – No information available.

**14.4 Packing group**

- ADR, ADN, IMDG, IATA – No information available.

**14.5 Environmental hazards**

- ADR, ADN, IMDG, IATA – No information available.

**14.6 Special precautions for user**

- ADR, ADN, IMDG, IATA – No information available.

**14.7 Transport in bulk**

- ADR, ADN, IMDG, IATA – No information available.

**15. Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Law on Health and Safety at Work (Official Gazette of the Republic of Macedonia no. 92/2007, 137/2013, 164/2013, 158/2014); Law on Chemicals (Official Gazette of the Republic of Macedonia no. 145/2010, 53/2011, 164/2013); Law on Environment (Official Gazette of the Republic of Macedonia no. 53/2005, 24/2007, 93/2013). Rulebook amending the Rulebook on the Form and Contents of the Application Form for Obtaining Permit for Import, Export and Transport of Toxic Chemicals and Their Precursors for Purposes Not Prohibited (Official Gazette of the Republic of Macedonia no. 291/2014); Rulebook on Specific Requirements for the Legal Persons Trading in Dangerous Chemicals (Official Gazette of the Republic of Macedonia no. 132/2008); Rulebook on Labelling and Packaging of Dangerous Chemicals (Official Gazette of the Republic of Macedonia no. 85/2009); Rulebook on Hazardous Substances, Threshold Limit Values of Hazardous Substances and Criteria or Properties for Classifying Substances as Hazardous (Official Gazette of the Republic of Macedonia no. 25/2010); List of Prohibitions and Restrictions in the Use of Chemicals (Official Gazette of the Republic of Macedonia no. 57/2011); Rulebook on Chemical Safety Assessment and Contents of the Chemical Safety Report (Official Gazette of the Republic of Macedonia no. 82/2011); List of Polluting Materials and Substances (Official Gazette of the Republic of Macedonia no. 122/2011); Law on Chemicals (Official Gazette of the Republic of Macedonia no. 31/2014); Rulebook amending the Rulebook on the Form and Contents of the Application Form for Obtaining Permit for Import, Export and Transport of Toxic Chemicals and Their Precursors for Purposes Not Prohibited (Official Gazette of the Republic of Macedonia no. 192/2014).

**15.2 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture.



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## 16. Other information

Reason for issue: New format

This Safety Data Sheet summarises to the best of our knowledge the health and safety hazard information on the product. Each user should read this Safety Data Sheet and consider the information in the context of how the product should be handled and used, as well as how it should be stored, transported and disposed of. If clarification or further information is needed to ensure an appropriate risk assessment can be made, the user should contact this company. This information relates only to the specific product and may not be valid if the product is used in combination with any other material. All the information contained in this Safety Data Sheet is true and up-to-date.

### Relevant labels

- **Hazard pictograms:**



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- Signal word: Warning

### H – statements

H319- Causes serious eye irritation.

H412- Harmful to aquatic life with long lasting effects.

### P – statements

P273- Avoid release to the environment.

P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### R – statements

R36- Irritating to eyes.

R52/53- Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

### S – statements

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S61- Avoid release to the environment.