Material Safety Data Sheet
Version 02
Revision 18.10.2012
Printing date 18.10.2012

Useable for:

BA E-8100 Metanephrine Plasma ELISA Fast Track
BA E-8200 Normetanephrine Plasma ELISA Fast Track
BA E-8300 2-MET Plasma ELISA Fast Track

Single components with dangerous ingredients:

- **BA R-8301** Standard A STANDARD A
- **BA R-8302** Standard B STANDARD B
- **BA R-8303** Standard C STANDARD C
- **BA R-8304** Standard D STANDARD D
- **BA R-8305** Standard E STANDARD E
- **BA R-8306** Standard F STANDARD F
- **BA R-8351** Control 1 CONTROL 1
- **BA R-8352** Control 2 CONTROL 2
- **BA R-8312** Acylation Concentrate ACYL-CONC

Not listed single components contains no hazardous substances in concentrations to be declared, a labelling is not required.
1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**

- **Trade name:** Standard / Control

- **Article number:**
  - REF: BA R-8301  **Standard A**
  - REF: BA R-8302  **Standard B**
  - REF: BA R-8303  **Standard C**
  - REF: BA R-8304  **Standard D**
  - REF: BA R-8305  **Standard E**
  - REF: BA R-8306  **Standard F**
  - REF: BA R-8351  **Control 1**
  - REF: BA R-8352  **Control 2**

- **Application of the substance / the preparation:** laboratory reagent / Immunoassay

The product is intended for professional use.

- **Details of the supplier of the safety data sheet**

  - **Manufacturer/Supplier:** Labor Diagnostika Nord GmbH & Co. KG
  - Am Eichenhain 1
  - 48531 Nordhorn, Germany
  - Phone  +49 5921 8197 100
  - Fax   +49 5921 8197 106
  - E-mail support@ldn.de

2 Hazards identification

- **Classification of the substance or mixture**

  GHS07

  H302  Harmful if swallowed.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

  Xn; R22

  R22:  Harmful if swallowed.

- **Information concerning particular hazards for human and environment:**

  No special remarkable hazards. Please observe the informations given in this safety data sheet

- **Classification system:**

  The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**

  - **GHS label elements**
    The product is classified and labelled according to the Globally Harmonized System (GHS).

  - **Hazard pictograms** GHS07

  - **Signal word** Warning

- **Hazard statements** Harmful if swallowed.

- **Precautionary statements**

  - **Wear protective gloves/protective clothing/eye protection/face protection.**
  - **After swallowing:** immediately make victim drink water (two glasses at most). Consult a physician.

  - **Other hazards** None known.

  **Trade name:** Standard / Control
3 Composition/information on ingredients

- **Chemical characterization:** Mixtures Preparation
- **Description:** Trade secret (Reagent mixture)
  - H302 Harmful if swallowed.
  - R22 Harmful if swallowed.

4 First aid measures

- **Description of first aid measures**
  - **After inhalation** fresh air.
  - **After skin contact** Immediately wash with water and soap and rinse thoroughly.
  - **After eye contact** Rinse out with plenty of water. Immediately call in ophthalmologist.
  - **After swallowing** Immediately make victim drink water (two glasses at most). Consult a physician.
  - **Information for doctor**
  - **Most important symptoms and effects, both acute and delayed**
    - No further relevant information available.
  - **Indication of any immediate medical attention and special treatment needed**
    - No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents**
  - CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - **Special hazards arising from the substance or mixture**
  - No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Absorb with liquid-binding material. Ensure adequate ventilation.
- **Reference to other sections**
  - See Section 7 for information on safe handling
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

Trade name: Standard / Control
7 Handling and storage

- **Handling**
- **Precautions for safe handling** Observe label precautions.
- **Information about fire - and explosion protection**: No special measures required.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage** Store at +15°C to +25°C.
  - **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities**: No further data; see item 7.
- **Control parameters**: Contains no substances with occupational exposure limit values.
- **Exposure controls**: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.
- **Individual protection measures**:
  - Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.
- **General protective and hygienic measures**:
  - Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
- **Respiratory protection**:
  - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands**:
  - **Protective gloves**. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
- **Material of gloves**:
  - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - The quality of the protective gloves must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Penetration time of glove material**:
  - The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection**: Tightly sealed goggles.
- **Body protection**: lab coat
9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - **Form:** liquid
    - **Colour:** colorless
    - **Odour:** Odourless
    - **Odour threshold:** Not determined
    - **pH-value at 20°C:** <0.5
  - **Change in condition**
    - **Melting point/Melting range:** undetermined
    - **Boiling point/Boiling range:** undetermined
    - **Flash point:** Not applicable
    - **Flammability (solid, gaseous):** Not applicable
    - **Ignition temperature:**
      - **Decomposition temperature:** Not determined
      - **Self-igniting:** Product is not self-igniting.
      - **Danger of explosion:** Product does not present an explosion hazard.
      - **Explosion limits (lower, upper):** Not determined
    - **Vapour pressure:** Not applicable
    - **Density at 20°C:** Not determined
    - **Relative density**
    - **Vapour density**
    - **Evaporation rate**
    - **Solubility in / Miscibility with Water:** Fully miscible
    - **Segregation coefficient (n-octanol/water):** Not determined
    - **Viscosity:**
      - **dynamic:** Not determined
      - **kinematic:** Not determined
    - **Solvent content:**
    - **Organic solvents:** 0 %
    - **Water:** 100 %
    - **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** Forms explosive mixtures with air on intense heating.
- **Chemical stability** Sensitivity to light
- **Possibility of hazardous reactions**
  - Violent reactions possible with: strong alkalis, Strong oxidizing agents
- **Conditions to avoid** Strong heating.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

*Trade name: Standard / Control*
11 Toxicological information

Information on toxicological effects

- **Acute oral toxicity:**
  - LD50 rat
  - Dose: 1.850 mg/kg (anhydrous substance) (RTECS)
  - Symptoms: Nausea, Vomiting, Diarrhoea, Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

- **Primary irritant effect:**
  - on the skin: Irritant effect
  - on the eye: Irritant effect.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**
  - Other dangerous properties can not be excluded.
  - Handle in accordance with good industrial hygiene and safety practice.

12 Ecological information

- **Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
  - **Persistence and degradability** No further relevant information available.
  - **Behaviour in environmental systems:**
    - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.

- **Additional ecological information:**
  - **General notes:** Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system.
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation**
    - Dispose as according to national and regional laws as dangerous good.
  - **Uncleaned packaging:**
    - **Recommendation:**
      - Dispose of packaging according to applicable local, state, and federal regulations.

Trade name: Standard / Control
14 Transport information

- ADR/RID: UN 2585
- IATA: UN 2585
- IMDG: UN 2585
- EmS: F-A S-B

The transport regulations are cited according to international regulations and in the form applicable in Germany. Possible national deviations in other countries are not considered.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- GHS label elements: The product is classified and labelled according to the Globally Harmonized System (GHS).
- Hazard pictograms: GHS07
- Signal word: Warning
- Hazard statements:
  - Causes skin irritation.
  - Causes serious eye irritation.
- Precautionary statements:
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - Specific treatment (see on this label).
  - IF SKIN IRRITATION OCCURS: Get medical advice/attention.
  - IF EYE IRRITATION PERSISTS: Get medical advice/attention.
- National regulations
- Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  - H302: Harmful if swallowed.
  - R22: Harmful if swallowed.
- Department issuing MSDS: Safety Representative
- Contact: LDN

Trade name: Standard / Control
1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Product identifier**
  - **Trade name:** Acylation Concentrate
  - **Article number:** BA R-8312
- **Application of the substance / the preparation:** laboratory reagent / Immunoassay
  - The product is intended for professional use.
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Labor Diagnostika Nord GmbH & Co. KG
    - Am Eichenhain 1
    - 48531 Nordhorn, Germany
    - Phone +49 5921 8197 100
    - Fax +49 5921 8197 106
    - E-mail support@ldn.de

2 Hazards identification

- **Classification of the substance or mixture**
  - GHS07
    - H302  Harmful if swallowed.
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
    - Xn; R22
    - R22: Harmful if swallowed.
  - **Information concerning particular hazards for human and environment:**
    - No special remarkable hazards. Please observe the informations given in this safety data sheet
  - **Classification system:**
    - The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
  - GHS label elements
    - The product is classified and labelled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms** GHS07
  - **Signal word** Warning
  - **Hazard statements** Harmful if swallowed.
  - **Precautionary statements**
    - Wear protective gloves/protective clothing/eye protection/face protection.
    - After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
  - **Other hazards** None known.

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures Preparation
  - **Description:** Trade secret (Reagent mixture)
    - H302  Harmful if swallowed.
    - R22  Harmful if swallowed.

  - **Trade name:** Acylation Concentrate
4 First aid measures

- Description of first aid measures
  - After inhalation fresh air.
  - After skin contact Immediately wash with water and soap and rinse thoroughly.
  - After eye contact Rinse out with plenty of water. Immediately call in ophthalmologist
  - After swallowing
    Immediately make victim drink water (two glasses at most). Consult a physician.
- Information for doctor
- Most important symptoms and effects, both acute and delayed
  No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

5 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents
  CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Absorb with liquid-binding material. Ensure adequate ventilation.
- Reference to other sections
  See Section 7 for information on safe handling
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

- Handling
- Precautions for safe handling Observe label precautions.
- Information about fire - and explosion protection: No special measures required.
- Conditions for safe storage, including any incompatibilities
  - Storage Store at +15°C to +25°C.
  - Specific end use(s) No further relevant information available.
8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters:** Contains no substances with occupational exposure limit values.
- **Exposure controls:** Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.
- **Individual protection measures:**
  Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.
- **General protective and hygienic measures:**
  Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
- **Respiratory protection:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 
  Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
- **Material of gloves:**
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  The quality of the protective gloves must be chosen as a function of the specific working place concentration and quantity of hazardous substances. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Penetration time of glove material:**
  The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
  Tightly sealed goggles.
- **Body protection:** lab coat

*Trade name: Acylation Concentrate*
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: liquid
      - Colour: colorless
      - Odour: Odourless
    - Odour threshold: Not determined
    - pH-value at 20°C: 2.7
  - Change in condition
    - Melting point/Melting range: undetermined
    - Boiling point/Boiling range: undetermined
    - Flash point: Not applicable
    - Flammability (solid, gaseous): Not applicable
    - Ignition temperature: Not determined
    - Decomposition temperature: Not determined
    - Self-igniting: Product is not self-igniting.
    - Danger of explosion: Product does not present an explosion hazard.
    - Explosion limits (lower, upper): Not determined
    - Vapour pressure: Not applicable
    - Density at 20°C: Not determined
    - Relative density: Not determined
    - Vapour density: Not determined
    - Evaporation rate: Not determined
    - Solubility in / Miscibility with Water: Fully miscible
    - Segregation coefficient (n-octanol/water): Not determined
    - Viscosity: Not determined
    - dynamic: Not determined
    - kinematic: Not determined
    - Solvent content:
      - Organic solvents: 0 %
      - Water: 100 %
    - Other information
      - No further relevant information available.

10 Stability and reactivity

- Reactivity Forms explosive mixtures with air on intense heating.
- Chemical stability Sensitivity to light
- Possibility of hazardous reactions
  - Violent reactions possible with: strong alkalis, Strong oxidizing agents
- Conditions to avoid Strong heating.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known

Trade name: Acylation Concentrate
11 Toxicological information

Information on toxicological effects

- **Acute oral toxicity:**
  LD50 rat
  Dose: 1.510 mg/kg (RTECS)
  Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract., Nausea
  absorption
- **Primary irritant effect:**
  - on the skin: Irritant effect
  - on the eye: Irritant effect
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
  Systemic effects:
  After absorption:
  Gastrointestinal disturbance, Impairment of vision
  Further data:
  Handle in accordance with good industrial hygiene and safety practice.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
  - **General notes:** Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water. Do not allow product to reach ground water, water course or sewage system.
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.
  - **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
  Dispose as according to national and regional laws as dangerous good.
  - **Uncleaned packaging:**
  - **Recommendation:**
    Dispose of packaging according to applicable local, state, and federal regulations.

*Trade name: Acylation Concentrate*
Material Safety Data Sheet


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14 Transport information

- Not classified as dangerous in the meaning of transport regulations.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - GHS label elements The product is classified and labelled according to the Globally Harmonized System (GHS).
  - Hazard pictograms GHS07
  - Signal word Warning
  - Hazard statements
    Causes skin irritation.
    Causes serious eye irritation.
  - Precautionary statements
    Wear protective gloves/protective clothing/eye protection/face protection.
    IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    Specific treatment (see on this label).
    Take off contaminated clothing and wash before reuse.
    If skin irritation occurs: Get medical advice/attention.
    If eye irritation persists: Get medical advice/attention.
- National regulations
  - Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
  - Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship

- Relevant phrases
  H302 Harmful if swallowed.
  R22 Harmful if swallowed.
- Department issuing MSDS: Safety Representative
- Contact: LDN

Trade name: Acylation Concentrate