

# SAFETY DATA SHEET **AB 172435**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Europe

## 1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

### 1.1 PRODUCT IDENTIFIER

**Product name** Ultramark 1621, Mass Spec Std  
**Product code** AB 172435

### 1.2 IDENTIFIED USES

Chemicals used in research and development

### 1.3 DETAILS OF THE COMPANY OF THE SAFETY DATA SHEET

ABCR GmbH & Co. KG  
 Im Schlehert 10  
 76187 Karlsruhe  
 Germany

**Telephone number** +49 (0)721 950 610  
**Email** sds@abcr.de

### 1.4 EMERGENCY TELEPHONE NUMBER

+49 (0) 6131/19240  
[www.giftinfo.uni-mainz.de](http://www.giftinfo.uni-mainz.de)

## 2. HAZARDS IDENTIFICATION

### 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

**Product definition** Substance

### 2.2 CLASSIFICATION ACCORDING TO REGULATION (EC) NO. 1272/2008 [CLP/GHS]

Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2  
 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2  
 STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3

#### Hazard pictograms



**Signal word** Warning

#### Precautionary statements

**Prevention** Wear protective gloves. Wear eye or face protection. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.


<b>Response</b>	<p>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.</p> <p>IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse.</p> <p>If skin irritation occurs: Get medical attention.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>If eye irritation persists: Get medical attention.</p>
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents and container in accordance with all local, regional, national and international regulations.

## 2.3 CLASSIFICATION ACCORDING TO DIRECTIVE 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 67/548/EEC and its amendments.

<b>Classification</b>	Xi; R36/37/38
<b>Physical/chemical hazards</b>	Not applicable.
<b>Human health hazards</b>	Irritating to eyes, respiratory system and skin.
<b>Environmental hazards</b>	Not applicable.

## 2.4 CLASSIFICATION ACCORDING TO DIRECTIVE 67/548/EEC [DSD]

<b>Hazard symbol or symbols</b>	
<b>Indication of danger</b>	Irritant
<b>Risk phrases</b>	R36/37/38- Irritating to eyes, respiratory system and skin.
<b>Safety phrases</b>	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.
<b>Supplemental label elements</b>	Not applicable.

## 2.5 OTHER HAZARDS

<b>Other hazards which do not result in classification</b>	Not available.
--	----------------

See section 16 for the full text of the R-phrases declared above

See Section 11 for more detailed information on health effects and symptoms.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture                      Mono-constituent substance

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Ultramark 1621, Mass Spec Std	CAS: 105809-15-2	100	Xi; R36/37/38  See section 16 for the full text of the R-phrases declared above	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335  See Section 16 for the full text of the H statements declared above.	[A]

Type

[A] Constituent

[B] Impurity

[C] Stabilizing additive

Occupational exposure limits, if available, are listed in Section 8.

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

<b>Eye contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. Get medical attention. If necessary, call a poison center or physician. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Skin contact</b>	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. 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.
<b>Protection of first-aiders</b>	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.

## 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS; BOTH ACUTE AND DELAYED

### Potential acute health effects

<b>Eye contact</b>	Causes serious eye irritation.
<b>Inhalation</b>	May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Skin contact</b>	Causes skin irritation.
<b>Ingestion</b>	Irritating to mouth, throat and stomach.

### Over-exposure signs/symptoms

<b>Eye contact</b>	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	Adverse symptoms may include the following: respiratory tract irritation coughing
<b>Skin contact</b>	Adverse symptoms may include the following: irritation redness

## 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

<b>Notes to physician</b>	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	No specific treatment.

## 5. FIREFIGHTING MEASURES

### 5.1 EXTINGUISHING MEDIA

<b>Suitable extinguishing media</b>	In case of fire, use water spray (fog), foam, dry chemical or CO <sub>2</sub> .
<b>Unsuitable extinguishing media</b>	None known.

### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

<b>Hazards from the substance or mixture</b>	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous combustion products</b>	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides halogenated compounds

### 5.3 ADVICE FOR FIREFIGHTERS

<b>Special precautions for fire-fighters</b>	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 personal risk or without suitable training.
--	---

**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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- For non-emergency personnel** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 ENVIRONMENTAL PRECAUTIONS

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

- Small spill** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

### 6.4 REFERENCE TO OTHER SECTIONS

See Section 1 for emergency contact information.  
 See Section 8 for information on appropriate personal protective equipment.  
 See Section 13 for additional waste treatment information.

## 7. HANDLING AND STORAGE

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 PRECAUTIONS FOR SAFE HANDLING

<b>Protective measures</b>	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
<b>Advice on general occupational hygiene</b>	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 7.3 SPECIFIC END USE(S)

<b>Recommendations</b>	Not available.
<b>Industrial sector specific solutions</b>	Not available.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 CONTROL PARAMETERS

#### Occupational exposure limits

No exposure limit value known.

#### Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

#### Derived effect levels

No DELs available.

#### Predicted effect concentrations

No PECs available.

### 8.2 EXPOSURE CONTROLS

<b>Appropriate engineering controls</b>	Use only with adequate ventilation. If user operations generate dust, fumes, gas, 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.
<b>Individual protection measures</b>	
<b>Hygiene measures</b>	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.
<b>Eye/face protection</b>	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.
<b>Skin protection</b>	
<b>Hand protection</b>	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.
<b>Body protection</b>	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.
<b>Other skin protection</b>	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Respiratory protection</b>	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.
<b>Environmental exposure controls</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	
<b>Physical state</b>	Liquid.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Burning time</b>	Not applicable.
<b>Burning rate</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not available.

<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Not available.
<b>Partition coefficient: n-octanol/ water</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not available.
<b>Oxidizing properties</b>	Not available.

## 9.2 OTHER INFORMATION

No additional information.

## 10. STABILITY AND REACTIVITY

### 10.1 REACTIVITY

No specific test data related to reactivity available for this product or its ingredients.

### 10.2 CHEMICAL STABILITY

Stable under recommended storage and handling conditions (see section 7).

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4 CONDITIONS TO AVOID

heat  
moisture

### 10.5 INCOMPATIBLE MATERIALS

oxidizing agents

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

#### Acute toxicity

**Conclusion/Summary** Not available.

#### Irritation/Corrosion

**Conclusion/Summary** Not available.



### Sensitizer

Conclusion/Summary Not available.

### Mutagenicity

Conclusion/Summary Not available.

### Carcinogenicity

Conclusion/Summary Not available.

### Reproductive toxicity

Conclusion/Summary Not available.

### Teratogenicity

Conclusion/Summary Not available.

Information on the likely routes of exposure Not available.

### Potential acute health effects

<b>Inhalation</b>	May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Skin contact</b>	Irritating to mouth, throat and stomach.
<b>Ingestion</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation</b>	Adverse symptoms may include the following: respiratory tract irritation coughing
<b>Ingestion</b>	No specific data.
<b>Skin contact</b>	Adverse symptoms may include the following: irritation redness
<b>Eye contact</b>	Adverse symptoms may include the following: pain or irritation watering redness

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** Not available.

**Potential delayed effects** Not available.

#### Long term exposure

**Potential immediate effects** Not available.

**Potential delayed effects** Not available.

## Potential chronic health effects

Not available.

<b>Conclusion/Summary</b>	Not available.
<b>General</b>	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	No known significant effects or critical hazards.
<b>Mutagenicity</b>	No known significant effects or critical hazards.
<b>Teratogenicity</b>	No known significant effects or critical hazards.
<b>Developmental effects</b>	No known significant effects or critical hazards.
<b>Fertility effects</b>	No known significant effects or critical hazards.
<b>Other information</b>	Not available.

## 12. ECOLOGICAL INFORMATION

### 12.1 TOXICITY

**Conclusion/Summary** Not available.

### 12.2 PERSISTENCE AND DEGRADABILITY

**Conclusion/Summary** Not available.

### 12.3 BIOACCUMULATIVE POTENTIAL

Not available.

### 12.4 MOBILITY IN SOIL

**Soil/water partition coefficient (K<sub>oc</sub>)** Not available.

**Mobility** Not available.

### 12.5 RESULTS OF PBT AND VPVB ASSESSMENT

**PBT** No.

**vPvB** Not available.

### 12.6 OTHER ADVERSE EFFECTS

No known significant effects or critical hazards.

## 13. DISPOSAL CONSIDERATIONS

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 WASTE TREATMENT METHODS

**Product**

**Methods of disposal**

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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.

**Hazardous waste**

The classification of the product may meet the criteria for a hazardous waste.

**Packaging**

**Methods of disposal**

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions**

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**14. TRANSPORT INFORMATION**

	<b>ADR/RID</b>	<b>ADN/ADNR</b>	<b>IMDG</b>	<b>IATA</b>
<b>14.1 UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>14.2 UN proper shipping name</b>	-	-	-	-
<b>14.3 Transport hazard class(es)</b>	-	-	-	-
<b>14.4 Packing group</b>	-	-	-	-
<b>14.5 Environmental hazards</b>	No.	No.	No.	No.
<b>14.6 Special precautions for user</b>	Not available.	Not available.	Not available.	Not available.
<b>Additional information</b>	-	-	-	-

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not available.

## 15. REGULATORY INFORMATION

### 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

#### EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** Not applicable.

#### Other EU regulations

Europe inventory Not determined.

Black List Chemicals Not listed

Priority List Chemicals Not listed

Integrated pollution prevention and control list (IPPC) - Air Not listed

Integrated pollution prevention and control list (IPPC) - Water Not listed

Chemical Weapons Convention List Schedule I Chemicals Not applicable.

Chemical Weapons Convention List Schedule II Chemicals Not applicable.

Chemical Weapons Convention List Schedule III Chemicals Not applicable.

### 15.2 Chemical Safety Assessment

Not available.

## 16. OTHER INFORMATION

▣ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms**

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Irrit. 2, H315	Expert judgment
Eye Irrit. 2, H319	Expert judgment
STOT SE 3, H335	Expert judgment

<b>Full text of abbreviated H statements</b>	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
<b>Full text of classifications [CLP/GHS]</b>	Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2 STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3
<b>Full text of abbreviated R phrases</b>	R36/37/38- Irritating to eyes, respiratory system and skin.
<b>Full text of classifications [DSD/DPD]</b>	Xi - Irritant
<b>Date of issue/ Date of revision</b>	23.09.2011.
<b>Version</b>	1

### 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.

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.