SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
- Trade name: AR 300-80
- Article number: AR 300-80

1.2 Relevant identified uses of the substance or mixture and uses advised against
- No further relevant information available.

1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  Allresist GmbH
  Am Biotop 14
  15344 Strausberg
  GERMANY
  E-Mail: info@allresist.de
  Tel.: +49 3341 35 93 0

- Further information obtainable from: Sales
- Emergency telephone number:
  Poison center of the Charité Berlin:
  +4930 30686700
  E-Mail: giftnotruf@charite.de

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Flame</th>
<th>Flam. Liq. 2</th>
<th>H225</th>
<th>Highly flammable liquid and vapour.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>H319</td>
<td>Causes serious eye irritation.</td>
<td></td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>H336</td>
<td>May cause drowsiness or dizziness.</td>
<td></td>
</tr>
</tbody>
</table>

2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
Safety data sheet
according to 1907/2006/EC, Article 31


Trade name: AR 300-80

- **Hazard pictograms**
  
  ![GHS02](image)
  ![GHS07](image)

- **Signal word** Danger

- **Hazard-determining components of labelling:**
  2-methoxy-1-methylethyl acetate
  acetone

- **Hazard statements**
  H225 Highly flammable liquid and vapour.
  H319 Causes serious eye irritation.
  H336 May cause drowsiness or dizziness.

- **Precautionary statements**
  P101 If medical advice is needed, have product container or label at hand.
  P102 Keep out of reach of children.
  P103 Read carefully and follow all instructions.
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
  P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
  P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P405 Store locked up.
  P501 Dispose of contents/container in accordance with local/regiona/national/international regulations.

- **Additional information:**

### 2.3 Other hazards

- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
  - **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**
<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>108-65-6</td>
<td>203-603-9</td>
<td>2-methoxy-1-methylethyl acetate</td>
<td>50-100%</td>
</tr>
<tr>
<td>67-64-1</td>
<td>200-662-2</td>
<td>acetone</td>
<td>10%</td>
</tr>
</tbody>
</table>

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.
**SECTION 4: First aid measures**

4.1 Description of first aid measures

- General information: Immediately remove any clothing soiled by the product.
- After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

**SECTION 5: Firefighting measures**

5.1 Extinguishing media

- Suitable extinguishing agents:
  - CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

- Protective equipment: No special measures required.

**SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Dilute with plenty of water. Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

6.4 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.

**SECTION 7: Handling and storage**

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

- Information about fire - and explosion protection:
  - Keep ignition sources away - Do not smoke.
- Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

- Storage:
  - Requirements to be met by storerooms and receptacles: Store in a cool location.
  - Information about storage in one common storage facility: Not required.

Further information about storage conditions:

- Keep container tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.
· Recommended storage temperature: 10-22°C
· Storage class (TRGS): 3
· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

<table>
<thead>
<tr>
<th>108-65-6 2-methoxy-1-methylethyl acetate</th>
<th>67-64-1 acetone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WEL</strong></td>
<td><strong>WEL</strong></td>
</tr>
<tr>
<td>Short-term value: 548 mg/m³, 100 ppm</td>
<td>Short-term value: 3620 mg/m³, 1500 ppm</td>
</tr>
<tr>
<td>Long-term value: 274 mg/m³, 50 ppm</td>
<td>Long-term value: 1210 mg/m³, 500 ppm</td>
</tr>
</tbody>
</table>

· DNELs

<table>
<thead>
<tr>
<th>108-65-6 2-methoxy-1-methylethyl acetate</th>
<th>67-64-1 acetone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Oral</td>
</tr>
<tr>
<td>DNEL Long-term - oral, systemic effects</td>
<td>DNEL Long-term - oral, systemic effects</td>
</tr>
<tr>
<td>1.67 mg/kg_bw/day (rat)</td>
<td>62 mg/kg_bw/day (general public)</td>
</tr>
<tr>
<td>Dermal</td>
<td>Dermal</td>
</tr>
<tr>
<td>DNEL Long-term – dermal, systemic effects</td>
<td>DNEL Long-term – dermal, systemic effects</td>
</tr>
<tr>
<td>153.5 mg/kg_bw/day (rat)</td>
<td>186 mg/kg_bw/day (Worker)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>Inhalative</td>
</tr>
<tr>
<td>DNEL Long-term - inhalation local effects</td>
<td>DNEL Long-term - inhalation local effects</td>
</tr>
<tr>
<td>33 mg/m³ (rat)</td>
<td>62 mg/kg_bw/day (general public)</td>
</tr>
<tr>
<td>DNEL Acute - inhalation, local effects</td>
<td>DNEL Acute - inhalation, local effects</td>
</tr>
<tr>
<td>275 mg/m³/day (rat)</td>
<td>2,420 mg/m³ (Worker)</td>
</tr>
<tr>
<td>Inhaleative</td>
<td>Inhaleative</td>
</tr>
<tr>
<td>DNEL long-term - inhalation local effects</td>
<td>DNEL long-term - inhalation local effects</td>
</tr>
<tr>
<td>2,420 mg/m³ (rat)</td>
<td>2,420 mg/m³ (Worker)</td>
</tr>
<tr>
<td>DNEL Long-term – inhalation, systemic effects</td>
<td>DNEL Long-term – inhalation, systemic effects</td>
</tr>
<tr>
<td>1,210 mg/m³/day (Worker)</td>
<td>1,210 mg/m³/day (Worker)</td>
</tr>
<tr>
<td>DNEL Acute inhalation systemic effects</td>
<td>DNEL Acute inhalation systemic effects</td>
</tr>
<tr>
<td>2,420 mg/m³ (rat)</td>
<td>2,420 mg/m³ (Worker)</td>
</tr>
</tbody>
</table>

· PNECs

<table>
<thead>
<tr>
<th>108-65-6 2-methoxy-1-methylethyl acetate</th>
<th>67-64-1 acetone</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEC short term, fresh water</td>
<td>PNEC short term, fresh water</td>
</tr>
<tr>
<td>0.635 mg/l (Aquatic organisms)</td>
<td>10.6 mg/l (Aquatic organisms)</td>
</tr>
<tr>
<td>PNEC short term, sea water</td>
<td>PNEC short term, sea water</td>
</tr>
<tr>
<td>0.0635 mg/l (Aquatic organisms)</td>
<td>1.06 mg/l (Aquatic organisms)</td>
</tr>
<tr>
<td>PNEC short term, sewage plant</td>
<td>PNEC short term, sewage plant</td>
</tr>
<tr>
<td>100 mg/l (Aquatic organisms)</td>
<td>100 mg/l (Aquatic organisms)</td>
</tr>
<tr>
<td>PNEC short term fresh water sediment</td>
<td>PNEC short term fresh water sediment</td>
</tr>
<tr>
<td>3.29 mg/kg (Aquatic organisms)</td>
<td>30.4 mg/kg (Aquatic organisms)</td>
</tr>
<tr>
<td>PNEC short term soil</td>
<td>PNEC short term soil</td>
</tr>
<tr>
<td>0.29 mg/kg (Aquatic organisms)</td>
<td>29.5 mg/kg (Aquatic organisms)</td>
</tr>
<tr>
<td>PNEC short term sea water sediment</td>
<td>PNEC short term sea water sediment</td>
</tr>
<tr>
<td>0.329 mg/kg (Aquatic organisms)</td>
<td>3.04 mg/kg (Aquatic organisms)</td>
</tr>
<tr>
<td>PNEC short term, intermittent releases</td>
<td>PNEC short term, intermittent releases</td>
</tr>
<tr>
<td>6.35 mg/l (Aquatic organisms)</td>
<td>21 mg/l (Aquatic organisms)</td>
</tr>
</tbody>
</table>
54.0 Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
• Appropriate engineering controls: No further data; see item 7.
• Individual protection measures, such as personal protective equipment
  General protective and hygienic measures:
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing.
  Wash hands before breaks and at the end of work.
  Avoid contact with the eyes.
  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.
• Hand protection

![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.

Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection

![Tightly sealed goggles]

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
• General Information
  Physical state: Fluid
  Colour: Colourless
  Odour: Ester-like
  Odour threshold: Not determined.
  Melting point/freezing point: -66 °C
  Boiling point or initial boiling point and boiling range: 145.8 °C
  Flammability: Not applicable.
  Lower and upper explosion limit
    Lower: 1.5 Vol %
    Upper: 13 Vol %
  Flash point: 7 °C
54.0

· Auto-ignition temperature: Product is not selfigniting.
· Decomposition temperature: Not determined.
· pH at 20 °C: 6-8
· Viscosity: Not determined.
· Kinematic viscosity at 20 °C: 1.23 mm²/s
· Dynamic: Not determined.
· Solubility: Fully miscible.
· water: Not determined.
· Partition coefficient n-octanol/water (log value) Not determined.
· Vapour pressure at 20 °C: 4.9 hPa
· Density and/or relative density: Not determined.
· Density: 0.95 g/cm³
· Relative density: Not determined.
· Vapour density: Not determined.

9.2 Other information
· Appearance: Fluid
· Form: Fluid
· Important information on protection of health and environment, and on safety:
  · Ignition temperature: 315 °C (108-65-6 2-methoxy-1-methylethyl acetate)
  · Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Solvent content:
  · Organic solvents: 99.0 %
  · VOC (EC) 99.00 %
· Change in condition
  · Evaporation rate: Not determined.

Information with regard to physical hazard classes
· Explosives Void
· Flammable gases Void
· Aerosols Void
· Oxidising gases Void
· Gases under pressure Void
· Flammable liquids Highly flammable liquid and vapour.
· Flammable solids Void
· Self-reactive substances and mixtures Void
· Pyrophoric liquids Void
· Pyrophoric solids Void
· Self-heating substances and mixtures Void
· Substances and mixtures, which emit flammable gases in contact with water Void
· Oxidising liquids Void
· Oxidising solids Void
· Organic peroxides Void
· Corrosive to metals Void
· Desensitised explosives Void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.
10.2 Chemical stability
· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials** No further relevant information available.
· **10.6 Hazardous decomposition products** No dangerous decomposition products known.

**SECTION 11: Toxicological information**

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

  · **Acute toxicity**

    - **LD/LC50 values relevant for classification:**
      - **Oral**
        - Acute Toxicity Estimate of ingredient (ATE) oral \( >5,000 \text{ mg/kg (Worker)} \)
      - **Dermal**
        - Schätzwerke akuter Toxicität \( >2,000 \text{ mg/kg (Worker)} \)
      - **Inhalative**
        - Acute toxicity Estimate inhalative (4h) \( >20 \text{ mg/l (Worker)} \)

    - **108-65-6 2-methoxy-1-methylethyl acetate**
      - **Oral**
        - LD50 \( 8,532 \text{ mg/kg (rat)} \)
      - **Dermal**
        - LD50 \( 5,800 \text{ mg/kg (rat)} \)
      - **Inhalative**
        - LD50 \( 20,000 \text{ mg/kg (rabbit)} \)

  · **Serious eye damage/irritation** Causes serious eye irritation.
  · **STOT-single exposure** May cause drowsiness or dizziness.

· **11.2 Information on other hazards**

  - **Endocrine disrupting properties**
    - None of the ingredients is listed.

**SECTION 12: Ecological information**

· **12.1 Toxicity**

  - **Aquatic toxicity:**

    - **108-65-6 2-methoxy-1-methylethyl acetate**
      - **Inhalative**
        - LC50 (4h) \( 35.7 \text{ mg/l (rat)} \)
        - LC50 (96h) \( >100 \text{ mg/l (Fish)} \)
        - 100-180 mg/ltr (Oncorhynchus mykiss)
        - 134 mg/ltr (rainbow trout)
      - **EC50 (48h)**
        - 408 mg/l (daphnia)
      - **ErC50 (96h)**
        - \( >1,000 \text{ mg/ltr (algae)} \)
      - **NOEC**
        - 100 mg/ml (daphnia)

    - **67-64-1 acetone**
      - **Inhalative**
        - LC50 (4h) \( 76 \text{ mg/l (rat)} \)
        - LC50 (96h) \( 8,300 \text{ mg/ltr (Fish)} \)
        - LC50 (48h) \( 8,450 \text{ mg/ltr (daphnia)} \)
      - **EC50 (48h)**
        - 8,800 mg/l (Daphnia magna)
      - **EC50 (96h) mg/ltr**
        - 7,200 mg/ltr (algae)
      - **NOEC**
        - 4,740 mg/ml (Pseudokirchneriella subcapitata)
        - 2,212 mg/ml (daphnia)

· **12.2 Persistence and degradability**

    - **108-65-6 2-methoxy-1-methylethyl acetate** 90%
### SECTION 12: Additional Information

- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
  - **PBT**: Not applicable.
  - **vPvB**: Not applicable.
- **12.6 Endocrine disrupting properties**
  The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects** No further relevant information available.

**Additional ecological information:**
- **General notes:**
  - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation**
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging**
  - **Recommendation:** Disposal must be made according to official regulations.
  - **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- **14.1 UN number or ID number**
  - ADR, IMDG, IATA
    UN1993
- **14.2 UN proper shipping name**
  - ADR
    1993 FLAMMABLE LIQUID, N.O.S. (ACETONE, 2-methoxy-1-methylethyl acetate)
  - IMDG, IATA
    FLAMMABLE LIQUID, N.O.S. (ACETONE, 2-methoxy-1-methylethyl acetate)
- **14.3 Transport hazard class(es)**
  - ADR, IMDG, IATA
    - **Class** 3 Flammable liquids.
    - **Label** 3
- **14.4 Packing group**
  - ADR, IMDG, IATA
    II
- **14.5 Environmental hazards:**
  Not applicable.
- **14.6 Special precautions for user**
  - **Warning:** Flammable liquids.
  - **Hazard identification number (Kemler code):** 33
• **EMS Number:** F-E,S-E
• **Stowage Category:** B

**14.7 Maritime transport in bulk according to IMO instruments**

- **Transport/Additional information:**
  - **ADR**
    - **Limited quantities (LQ):** 1L
    - **Excepted quantities (EQ):** Code: E2
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 500 ml
  - **Transport category:** 2
  - **Tunnel restriction code:** D/E

- **IMDG**
  - **Limited quantities (LQ):** 1L
  - **Excepted quantities (EQ):** Code: E2
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 500 ml

- **UN "Model Regulation":** UN 1993 FLAMMABLE LIQUID, N.O.S. (ACETONE, 2-METHOXY-1-METHYLETHYL ACETATE), 3, II

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**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**
  - (Substances not listed)
  - None of the ingredients is listed.

- **Directive 2012/18/EU**
  - **Named dangerous substances - ANNEX I** None of the ingredients is listed.
  - **Seveso category P5c FLAMMABLE LIQUIDS**
  - **Qualifying quantity (tonnes) for the application of lower-tier requirements:** 5,000 t
  - **Qualifying quantity (tonnes) for the application of upper-tier requirements:** 50,000 t

- **National regulations:**
  - **VOC (EU)** 940.5 g/l

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

---

**SECTION 16: Other information**

- **Disclaimer**
  This safety data sheet contains only safety relevant information. The information is based on the state of our knowledge at the time of revision, however, it does not constitute a guarantee of product properties, product information or product specifications and does not establish a contractual legal relationship. This document is only valid in its unchanged form. In the event of changes by third parties, the exhibitor accepts no responsibility for form and content or for any damages or claims arising from such changes. The information is not transferable to other products. If the product named in this safety data sheet is mixed, blended or processed with other materials or is subjected to processing, the information in this safety data sheet cannot be transferred to the new material produced in this way, unless expressly stated otherwise. The data sheet does not release the user from the obligation to ensure that he acts in accordance with all regulations in connection with his activity.

- **Relevant phrases**
  - H225 Highly flammable liquid and vapour.
  - H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.

- **Department issuing SDS:** Quality Management department
- **Contact:** MSDS authorized Person

**Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3