



**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 12.12.2021

Version number 7.0 (replaces version 1.0)

Revision: 12.12.2021

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

- **1.1 Product identifier**
- **Trade name:** AR 600-549
- **Article number:** AR 600-549
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture**  
Intermediate product for the electronics industry. For industrial and commercial use only.
- **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](mailto:info@allresist.de)  
**Tel.:** +49 3341 35 93 0
- **Further information obtainable from:** Sales
- **1.4 Emergency telephone number:**  
Poison center of the Charité Berlin:  
+4930 30686700  
**E-Mail:** [giftnotruf@charite.de](mailto:giftnotruf@charite.de)

**SECTION 2: Hazards identification**

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



Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**  
H319 Causes serious eye irritation.

(Contd. on page 2)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 12.12.2021

Version number 7.0 (replaces version 1.0)

Revision: 12.12.2021

**Trade name: AR 600-549**

(Contd. of page 1)

- **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.*
- P264 *Wash thoroughly after handling.*
- P280 *Wear eye protection / face protection.*
- P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- P337+P313 *If eye irritation persists: Get medical advice/attention.*

- **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:**

CAS: 105-53-3 EINECS: 203-305-9	diethyl malonate	☠ Eye Irrit. 2, H319	50-100%
CAS: 100-66-3 EINECS: 202-876-1	anisole	☠ Flam. Liq. 3, H226; ☠ STOT SE 3, H336, EUH066	≤2.5%

- **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**

- **After skin contact:** Generally the product does not irritate the skin.
- **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:**

*CO<sub>2</sub>, 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** *Not required.*

- **6.2 Environmental precautions:** *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).*

(Contd. on page 3)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 12.12.2021

Version number 7.0 (replaces version 1.0)

Revision: 12.12.2021

Trade name: AR 600-549

(Contd. of page 2)

- **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** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Recommended storage temperature:** 10-22°C
- **Storage class (TRGS):** 10
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 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.

#### · DNELs

##### **105-53-3 diethyl malonate**

Dermal	DNEL Long-term – dermal, systemic effects	1.213 mg/kg_bw/day (Worker) 0.607 mg/kg_bw/day (general public)
Inhalative	DNEL Long-term – inhalation, systemic effects	8.468 mg/m <sup>3</sup> /day (Worker) 2.106 mg/m <sup>3</sup> /day (general public)

##### **100-66-3 anisole**

Inhalative	DNEL Long-term – inhalation, systemic effects	20 mg/m <sup>3</sup> /day (Worker)
------------	---	------------------------------------

#### · PNECs

##### **105-53-3 diethyl malonate**

PNEC Predicted No Effect Concentration, Freshwater	0.0118 mg/ltr (Aquatic organisms)
PNEC short term, sea water	0.00118 mg/l (Aquatic organisms)
PNEC short term, sewage plant	0.108 mg/l (Aquatic organisms)
PNEC short term fresh water sediment	4.62 mg/kg (Aquatic organisms)
PNEC short term soil	0.008557 mg/kg (terrestrial organisms)
PNEC short term sea water sediment	0.924 mg/kg (Aquatic organisms)

##### **100-66-3 anisole**

PNEC short term, fresh water	0.027 mg/l (Aquatic organisms)
PNEC short term, sea water	0.0027 mg/l (Aquatic organisms)
PNEC short term, sewage plant	30 mg/l (Aquatic organisms)
PNEC short term fresh water sediment	0.745 mg/kg (Aquatic organisms)
PNEC short term soil	0.133 mg/kg (terrestrial organisms)
PNEC short term sea water sediment	0.0745 mg/kg (Aquatic organisms)

(Contd. on page 4)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 12.12.2021

Version number 7.0 (replaces version 1.0)

Revision: 12.12.2021

Trade name: AR 600-549

(Contd. of page 3)

PNEC short term, intermittent releases

0.27 mg/l (Aquatic organisms)

· **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:** Not required.

· **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:**

-50 °C

· **Boiling point or initial boiling point and boiling range**

199 °C (105-53-3 diethyl malonate)

· **Flammability**

Not applicable.

· **Lower and upper explosion limit**

· **Lower:**

1.2 Vol %

· **Upper:**

12 Vol %

· **Flash point:**

88 °C

(Contd. on page 5)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 12.12.2021

Version number 7.0 (replaces version 1.0)

Revision: 12.12.2021

Trade name: AR 600-549

(Contd. of page 4)

· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH</b>	Mixture is non-soluble (in water).
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic at 20 °C:</b>	2.1 mPas
· <b>Solubility</b>	
· <b>water at 20 °C:</b>	20.8 g/l
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure at 40 °C:</b>	1.33 hPa
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	1.055 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>9.2 Other information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	2.0 %
· <b>VOC (EC)</b>	2.00 %
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not determined.

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

(Contd. on page 6)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 12.12.2021

Version number 7.0 (replaces version 1.0)

Revision: 12.12.2021

Trade name: AR 600-549

(Contd. of page 5)

- **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 mg/kg (Worker)
Dermal	Schätzwerte akuter Toxizität	>2,000 mg/kg (Worker)
Inhalative	Acute toxicity Estimate inhalative (4h)	>20 mg/l (Worker)

#### 105-53-3 diethyl malonate

Oral	LD50	15,794 mg/kg (rat)
Dermal	LD50	>16,960 mg/kg (rabbit)

#### 100-66-3 anisole

Oral	LD50	2,800 mg/kg (mouse)
		3,700 mg/kg (rat)

- **Serious eye damage/irritation** Causes serious eye irritation.

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

### SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

#### 105-53-3 diethyl malonate

	LC50 (96h) mg/ltr.	11.8 mg/ltr (Fish)
	EC50 (48h)	202.3 mg/l (daphnia)

#### 100-66-3 anisole

Inhalative	LC50 (4h)	>65.1 mg/l (rat)
	EC50 (48h)	27 mg/l (daphnia)
	EC50 (72h)	47 mg/l (algae)
	EC10 (72h)	21 mg/ltr. (algae)
	NOEC	300 mg/ml (Microorganism)

- **12.2 Persistence and degradability**

105-53-3	diethyl malonate	99 %
100-66-3	anisole	68 %

- **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.

(Contd. on page 7)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 12.12.2021

Version number 7.0 (replaces version 1.0)

Revision: 12.12.2021

**Trade name: AR 600-549**

(Contd. of page 6)

- **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.*

### SECTION 14: Transport information

- |   |                        |
|---|------------------------|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN number or ID number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                  | <i>not regulated</i>   |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                 | <i>not regulated</i>   |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR, ADN, IMDG, IATA</b></li> <li>· <b>Class</b></li> </ul> | <i>not regulated</i>   |
| <ul style="list-style-type: none"> <li>· <b>14.4 Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <i>not regulated</i>   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Environmental hazards:</b></li> </ul>  | <i>Not applicable.</i> |
| <ul style="list-style-type: none"> <li>· <b>14.6 Special precautions for user</b></li> </ul>  | <i>Not applicable.</i> |
| <ul style="list-style-type: none"> <li>· <b>14.7 Maritime transport in bulk according to IMO instruments</b></li> </ul>                                   | <i>Not applicable.</i> |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>   | <i>not regulated</i>   |

### SECTION 15: Regulatory information

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: (Substances not listed)</b></li> </ul> | <i>None of the ingredients is listed.</i> |
|---|---|
- **Directive 2012/18/EU**
  - **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*
  - **National regulations:**
  - **VOC (EU) 21.1 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*

(Contd. on page 8)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 12.12.2021

Version number 7.0 (replaces version 1.0)

Revision: 12.12.2021

**Trade name: AR 600-549**

(Contd. of page 7)

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**

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. 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