



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019  
Version: 9  
Language: en-GB,IE  
Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 1 of 10

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

#### 1.1 Product identifier

Trade name: Stopper AR 600-61  
REACH registration No.: 01-2119475104-44-XXXX

CAS-Number: 112-34-5  
EC-number: 203-961-6  
EU index number: 603-096-00-8

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

General use: Intermediate for electronic industry  
Reserved for industrial and professional use.

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

Company name: Allresist  
Gesellschaft für chemische Produkte zur Mikrostrukturierung mbH  
Street/POB-No.: Am Biotop 14  
Postal Code, city: 15344 Strausberg  
WWW: www.allresist.de  
E-mail: info@allresist.de  
Telephone: +49 (0)33 41-35 93-0  
Telefax: +49 (0)33 41-35 93-29  
Department responsible for information:  
Frau Dr. Zimmermann, Email: produktion@allresist.de

#### 1.4 Emergency telephone number

Telephone: +49 (0)33 41-35 93-0  
Only available during office hours.

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Eye Irrit. 2; H319 Causes serious eye irritation.

#### 2.2 Label elements

##### Labelling (CLP)



Signal word: **Warning**

Hazard statements: H319 Causes serious eye irritation.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019  
Version: 9  
Language: en-GB,IE  
Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 2 of 10

### Precautionary Statements:

- P264 Wash hands and face thoroughly after handling.  
P280 Wear protective gloves/protective clothing/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

Special danger of slipping by leaking/spilling product.

### Results of PBT and vPvB assessment:

No data available

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Chemical characterisation: C<sub>8</sub> H<sub>18</sub> O<sub>3</sub> = CH<sub>3</sub>-(CH<sub>2</sub>)<sub>3</sub>-O-(CH<sub>2</sub>)<sub>2</sub>-O-(CH<sub>2</sub>)<sub>2</sub>-OH  
2-(2-Butoxyethoxy)ethanol  
Water content 20%

CAS-Number: 112-34-5  
EC-number: 203-961-6  
EU index number: 603-096-00-8  
RTECS-Number: KJ9100000

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General information: IF exposed or concerned: Get medical advice/attention. First aider: Pay attention to self-protection!
- In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Seek medical attention.
- Following skin contact: Remove residues with soap and water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.
- After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.
- After swallowing: Rinse mouth immediately and drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult physician.

### 4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

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

Treat symptomatically.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019

Version: 9

Language: en-GB,IE

Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 3 of 10

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

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

Combustible. May form dangerous gases and vapours in case of fire.

Furthermore, there may develop: Carbon monoxide and carbon dioxide.

#### 5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information: Hazchem-Code: -

Use fine water spray to cool endangered containers.

Do not allow water used to extinguish fire to enter drains, ground or waterways.

Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

### SECTION 6: Accidental release measures

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

Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapour/aerosol/mist. Keep unprotected people away. Take off contaminated clothing and wash it before reuse. Wear appropriate protective equipment.

#### 6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains.

If necessary notify appropriate authorities.

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

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder.

Store in special closed containers and dispose of according to ordinance.

Additional information: Special danger of slipping by leaking/spilling product.

#### 6.4 Reference to other sections

Refer additionally to section 8 and 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid contact with skin and eyes. Do not breathe vapour/aerosol/mist. Wear appropriate protective equipment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019  
Version: 9  
Language: en-GB,IE  
Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 4 of 10

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

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

Requirements for storerooms and containers:

Store container tightly closed in a dry and cool place. Store only in original container. Protect from heat and direct sunlight. Store containers in upright position. Avoid admission of air/oxygen (formation of peroxide).

Unsuitable materials: Aluminium, copper, light metals.  
Storage temperature 10 - 22 °C.

Hints on joint storage:

Do not store together with oxidizing agents or light metals.  
Keep away from food, drink and animal feedingstuffs.

### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values:

Type	Limit value
Europe: IOELV: STEL	101.2 mg/m <sup>3</sup> ; 15 ppm
Europe: IOELV: TWA	67.5 mg/m <sup>3</sup> ; 10 ppm
Great Britain: WEL-STEL	101.2 mg/m <sup>3</sup> ; 15 ppm
Great Britain: WEL-TWA	67.5 mg/m <sup>3</sup> ; 10 ppm
Ireland: 15 minutes	101.2 mg/m <sup>3</sup> ; 15 ppm IOELV
Ireland: 8 hours	67.5 mg/m <sup>3</sup> ; 10 ppm IOELV

DNEL/DMEL: DNEL long-term, workers, inhalative: 67.5 mg/m<sup>3</sup> (systemic/local)  
DNEL short-term, workers, inhalative, local: 101.2 mg/m<sup>3</sup>  
DNEL short-term, workers, dermal, systemic: 20 mg/kg

PNEC: PNEC water (freshwater): 1 g/L  
PNEC water (marine water): 0.1 g/L  
PNEC water (intermittent release): 3.9 g/L  
PNEC sediment (freshwater): 4 mg/kg dw  
PNEC sediment (marine water): 0.4 mg/kg dw  
PNEC soil: 0.4 mg/kg dwt  
PNEC sewage treatment plant: 200 mg/L  
PNEC Secondary poisoning (food): 56 mg/kg

### 8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019  
Version: 9  
Language: en-GB,IE  
Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 5 of 10

### Personal protection equipment

#### Occupational exposure controls

- Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded. Use filter type A (= against vapours of organic substances) according to EN 14387. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.
- Hand protection: protective gloves according to EN 374.  
During full contact:  
Glove material: Nitrile rubber - Layer thickness: 0.4 mm.  
Breakthrough time: 480 min.  
During splash contact:  
Glove material: nitrile rubber - Layer thickness: 0.2 mm.  
Breakthrough time: 49 min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- Eye protection: Tightly sealed goggles according to EN 166.
- Body protection: Wear suitable protective clothing.
- General protection and hygiene measures:  
Do not breathe vapour/aerosol/mist. Avoid contact with skin and eyes. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. When handling large quantities, supply emergency spray.

### Environmental exposure controls

Do not allow to enter into ground-water, surface water or drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance: Physical state at 20 °C and 101.3 kPa: liquid  
Colour: colourless
- Odour: weak  
Odour threshold: No data available
- pH value: at 20 °C: 7
- Melting point/freezing point: approx. -68 °C  
Initial boiling point and boiling range: approx. 224 - 228 °C  
Flash point/flash point range: 99 °C (c.c.)  
Evaporation rate: No data available  
Flammability: No data available  
Explosion limits: LEL (Lower Explosion Limit): 0.90 Vol-%  
UEL (Upper Explosive Limit): 6.20 Vol-%
- Vapour pressure: at 130 °C: 40 hPa  
Vapour density: 5.6  
Density: at 20 °C: approx. 0.95 - 0.96 g/mL  
Water solubility: at 20 °C: completely miscible  
Partition coefficient: n-octanol/water: at 20 °C: 1 log P(o/w)  
Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019  
Version: 9  
Language: en-GB,IE  
Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 6 of 10

Auto-ignition temperature:	210 °C (1.013,25 hPa)
Decomposition temperature:	No data available
Viscosity, dynamic:	at 20 °C: 5.9 mPa*s
Viscosity, kinematic:	at 20 °C: 6.122 mm <sup>2</sup> /s
Explosive properties:	No data available
Oxidizing characteristics:	No data available

### 9.2 Other information

Molecular weight	162.2 g/mol
Additional information:	Surface tension: 32.8 mN/m at 20 °C

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Refer to 10.3

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No dangerous reactions with proper and specified storage and handling.

### 10.4 Conditions to avoid

Protect from heat and direct sunlight.  
Keep away from sources of ignition - No smoking.  
Avoid admission of air/oxygene (formation of peroxide).

### 10.5 Incompatible materials

Oxidizing agents, light metals.

### 10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity:	LD50 Rat, oral: 7291 mg/kg (OECD 401)
	LD50 Rabbit, dermal: 2764 mg/kg (OECD 402)
	LC50 Rat, inhalative: > 29 ppm/2h



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019

Version: 9

Language: en-GB,IE

Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 7 of 10

Toxicological effects:

- Acute toxicity (oral): Based on available data, the classification criteria are not met.
- Acute toxicity (dermal): Based on available data, the classification criteria are not met.
- Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Specific symptoms in animal studies (Rabbit): mild irritant (OECD 404)
- Serious eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation.
- Specific symptoms in animal studies (Rabbit): Irritant (OECD 405)
- Sensitisation to the respiratory tract: Lack of data.
- Skin sensitisation: Based on available data, the classification criteria are not met.
- Specific symptoms in animal studies (guinea pig): not sensitising (OECD 406)
- Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.
- Specific symptoms in animal studies (Salmonella typhimurium): Negative in the Ames test. (OECD 477)
- Carcinogenicity: Based on available data, the classification criteria are not met. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- Specific symptoms in animal studies (Rat): negative
- Effects on or via lactation: Lack of data.
- Specific target organ toxicity (single exposure): Lack of data.
- Specific target organ toxicity (repeated exposure): Lack of data.
- Aspiration hazard: Lack of data.

### General remarks

Warning - substance not yet tested completely. Further hazardous properties cannot be excluded.

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity:

- Daphnia toxicity:
  - EC50 Daphnia magna (Big water flea): > 100 mg/L/48h. (EC Directive 67/548/EEC)
- Fish toxicity:
  - LC50 Lepomis macrochirus (bluegill): 1,300 mg/L/96h. (OECD 203)
- Algae toxicity:
  - EC50 Desmodesmus subspicatus (green algae): > 100 mg/L/96h (OECD 201)
- Bacterial toxicity:
  - LC50 Pseudomonas putida: 1,170 mg/L/16h

### 12.2 Persistence and degradability

Further details:

- Biodegradation:
  - 91,7%/28d (OECD 301B)
  - Easily bio-degradable

Oxygen demand:

- Biological oxygen demand (BOD5): 0,25 g/g
- Chemical oxygen demand (COD): 2,08 g/g



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019  
Version: 9  
Language: en-GB,IE  
Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 8 of 10

### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

at 20 °C: 1 log P(o/w)

Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

No data available

### 12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Waste key number: 16 05 06\* = laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals  
\* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.  
Do not dispose of with household waste.  
Do not empty into drains.

#### Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.  
Non-contaminated packages may be recycled.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID, IMDG, IATA-DGR:

not applicable

### 14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

Not restricted

### 14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:

not applicable

### 14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

not applicable





# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019  
Version: 9  
Language: en-GB,IE  
Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 9 of 10

### 14.5 Environmental hazards

Marine pollutant: no

### 14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations - Great Britain

Hazchem-Code: -  
No data available

#### National regulations - EC member states

Volatile organic compounds (VOC):  
100 % by weight = 960 g/L  
Restrictions on use: REACH, annex XVII: No. 55

#### Labelling of packaging with <= 125mL content



Signal word: **Warning**

Hazard statements: not applicable

Precautionary Statements:  
not applicable

Further regulations, limitations and legal requirements:  
Use restriction according to REACH annex XVII, no.: 3

### 15.2 Chemical Safety Assessment

No data available



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019

Version: 9

Language: en-GB,IE

Date of print: 28/8/2020

## Stopper AR 600-61

Material number AR 600-61

Page: 10 of 10

### SECTION 16: Other information

#### Further information

Abbreviations and acronyms:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL: Occupational Exposure Limit Value

AS/NZS: Australian Standards/New Zealand Standards

CAS: Chemical Abstracts Service

CFR: Code of Federal Regulations

CLP: Classification, Labelling and Packaging

DMEL: Derived minimal effect level

DNEL: Derived no-effect level

EC50: Effective Concentration 50%

EC: European Community

EN: European Standard

EU: European Union

EEC: European Economic Community

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IMDG Code: International Maritime Dangerous Goods Code

LC50: Median lethal concentration

LD50: Lethal dose 50%

LEL: Lower Explosion Limit

log P(o/w): Partition coefficient: octanol/water

MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OSHA: Occupational Safety and Health Administration

PBT: Persistent, bioaccumulative and toxic

PNEC: Predicted no-effect concentration

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

TLV: Threshold Limit Value

vPvB: Very persistent and very bioaccumulative

WEL: Workplace Exposure Limit

Reason of change: Changes in section 1.3: Department responsible for information

Date of first version: 18/8/2010

#### Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.