## **ALLRESIST**



Page 1/10

Revision: 12.12.2021

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

Printing date 12.12.2021

Version number 1.1 (replaces version 1.0)

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

· 1.1 Product identifier

· Trade name: AR-N 4340

· Article number: AR-N 4340

· 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 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

## SECTION 2: Hazards identification

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



Flam. Liq. 3 H226 Flammable liquid and vapour.



STOT SE 3 H336 May cause drowsiness or dizziness.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

(Contd. of page 1)

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

Printing date 12.12.2021 Version number 1.1 (replaces version 1.0) Revision: 12.12.2021

Trade name: AR-N 4340

### · Hazard pictograms





GHS02

## · Signal word Warning

## · Hazard-determining components of labelling:

2-methoxy-1-methylethyl acetate

### · Hazard statements

H226 Flammable liquid and vapour.

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.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

### · Additional information:

EUH 208: Contains bis[4-(2,3-epoxypropoxy)phenyl]propane. May produce an allergic reaction.

- · 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: 108-65-6 2-methoxy-1-methylethyl acetate		50-100%
EINECS: 203-603-9	🔖 Flam. Liq. 3, H226; 🕦 STOT SE 3, H336	
CAS: 1675-54-3	bis[4-(2,3-epoxypropoxy)phenyl]propane	≥0.25-<1%
	Aquatic Chronic 2, H411; 🗘 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
	Specific concentration limits: Eye Irrit. 2; H319: $C \ge 5\%$	
	Skin Irrit. 2; H315: $C \ge 5 \%$	
	cresol (mix)	<1%
EINECS: 215-293-2	Acute Tox. 3, H301; Acute Tox. 3, H311; Skin Corr. 1B, H314; Eye Dam. 1, H318	

Additional information: For the wording of the listed hazard phrases refer to section 16.

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Printing date 12.12.2021 Version number 1.1 (replaces version 1.0) Revision: 12.12.2021

Trade name: AR-N 4340

(Contd. of page 2)

## 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 eve contact: Rinse opened eye for several minutes under running water.
- · 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: 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: 10-18°C
- · Storage class (TRGS): 3

(Contd. on page 4)

Printing date 12.12.2021 Version number 1.1 (replaces version 1.0) Revision: 12.12.2021

Trade name: AR-N 4340

(Contd. of page 3)

· 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:			
108-6	108-65-6 2-methoxy-1-methylethyl acetate		
	Short-term value: 548 mg/m³, 100 ppm		
	Long-term value: 274 mg/m³, 50 ppm		
	Sk		

#### · DNELs

# 108-65-6 2-methoxy-1-methylethyl acetate

1675 54 2 high (2.2 grammanam) nh ganllanan gu a				
	DNEL Acute - inhalation, local effects	$2,420 \text{ mg/m}^3 \text{ (rat)}$		
	DNEL Long-term – inhalation, systemic effects	275 mg/m³/day (rat)		
Inhalative	DNEL long-term - inhalation local effects	33 mg/m³ (rat)		
Dermal	DNEL Long-term – dermal, systemic effects	153.5 mg/kg_bw/day (rat)		
Oral	DNEL Long-term - oral, systemic effects	1.67 mg/kg_bw/day (rat)		

#### 1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane

Dermal	rmal DNEL Long-term – dermal, systemic effects 8.33 mg/kg_bw/day (Worker)				
	DNEL Acute - dermal systemic effects	8.33 mg/kg bw/day (Worker)			
Inhalative	DNEL Long-term – inhalation, systemic effects	12.25 mg/m³/day (Worker)			
	DNEL Acute inhalation systemic effects	12.25 mg/m³ (Worker)			

### · PNECs

# 108-65-6 2-methoxy-1-methylethyl acetate

PNEC short term, fresh water	0.635 mg/l (Aquatic organisms)
PNEC short term, sea water	0.0635 mg/l (Aquatic organisms)
PNEC short term, sewage plant	100 mg/l (Aquatic organisms)
PNEC short term fresh water sediment	3.29 mg/kg (Aquatic organisms)
PNEC short term soil	0.29 mg/kg (Aquatic organisms)
PNEC short term sea water sediment	0.329 mg/kg (Aquatic organisms)
PNEC short term, intermittent releases	6.35 mg/l (Aquatic organisms)

### 1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane

PNEC short term, fresh water	0.006 mg/l (Aquatic organisms)
PNEC short term, sea water	0.001 mg/l (Aquatic organisms)
PNEC short term fresh water sediment	0.341 mg/kg (Aquatic organisms)
PNEC short term soil	0.065 mg/kg (Aquatic organisms)
	0.034 mg/kg (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:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

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.

(Contd. on page 5)

Printing date 12.12.2021 Version number 1.1 (replaces version 1.0) Revision: 12.12.2021

Trade name: AR-N 4340

(Contd. of page 4)

### · 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
Colour:
Odour:
Odour threshold:
Melting point/freezing point:
Fluid
Yellowish
Ester-like
Not determined.
Undetermined.

· Boiling point or initial boiling point and boiling

range 145 °C • Flammability Not applicable.

· Lower and upper explosion limit

• Lower: 1.5 Vol %
• Upper: 10.8 Vol %

• Flash point: 44 °C (108-65-6 2-methoxy-1-methylethyl acetate)

· Auto-ignition temperature: Product is not selfigniting.

• **Decomposition temperature:** Not determined.

*pH Mixture is non-soluble (in water).* 

· Viscosity:

Kinematic viscosityDynamic:Not determined.Not determined.

· Solubility

• water: Fully miscible.
• Partition coefficient n-octanol/water (log value) Not determined.

· Vapour pressure at 20 °C: 3.1 hPa

· Density and/or relative density

• Density at 20 °C: 1.04 g/cm³
• Relative density Not determined.

(Contd. on page 6)

Printing date 12.12.2021 Version number 1.1 (replaces version 1.0) Revision: 12.12.2021

Trade name: AR-N 4340

	(Contd. of page 5
Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Fluid
Important information on protection of healt	th and
environment, and on safety.	
Ignition temperature:	315 °C
Explosive properties:	Product is not explosive. However, formation of
	explosive air/vapour mixtures are possible.
Solvent content:	
Organic solvents:	68.9 %
VOC (EC)	68.86-<68.88 %
Change in condition	
Evaporation rate	Not determined.
Information with regard to physical hazard c	classes
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	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 flamm	able
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void

## SECTION 10: Stability and reactivity

- $\cdot \textit{ 10.1 Reactivity No further relevant information available}.$
- 10.2 Chemical stability

· Corrosive to metals

· Desensitised explosives

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Void Void

- · 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	· LD/LC50 values relevant for classification:		
ATE (Acu	te Toxi	city Estimates)	
Oral	LD50	>530,270 mg/kg	
Dermal	LD50	>729,395 mg/kg	
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(Contd. on page 7)

Printing date 12.12.2021 Version number 1.1 (replaces version 1.0) Revision: 12.12.2021

Trade name: AR-N 4340

		(Co	ontd. of page 6)
108-65-6 2	-metho	oxy-1-methylethyl acetate	
Oral	LD50	8,532 mg/kg (rat)	
1675-54-3	bis[4-(	2,3-epoxypropoxy)phenyl propane	
Oral	LD50	>5,000 mg/kg (rat)	
Dermal	<i>LD50</i>	>2,000 mg/kg (rat)	
1319-77-3	cresol	(mix)	
Oral	LD50	1,454 mg/kg (rat)	
Dermal	<i>LD50</i>	2,000 mg/kg (rabbit)	
Inhalative	<i>LD50</i>	1.21 mg/kg (rat)	
		osure May cause drowsiness or dizziness.	
		on other hazards	
· Endocrine	disrup	ting properties	
1675-54-3	bis[4-	(2,3-epoxypropoxy)phenyl]propane	List II

# SECTION 12: Ecological information

Aquatic to	xicity:		
108-65-62	?-methoxy-1-methyl	ethyl acetate	
Inhalative	LC50 (4h)	35.7 mg/l (rat)	
	LC50 (96h) mg/ltr.	>100 mg/ltr (Fish)	
		100-180 mg/ltr (Or	ncorhynchus mykiss)
		134 mg/ltr (rainbo	w trout)
	EC50 (48h)	408 mg/l (daphnia)	
	ErC50 (96h)	>1,000 mg/ltr (alg	ae)
	NOEC	100 mg/ml (daphni	ia)
1675-54-3	bis[4-(2,3-epoxypro	ppoxy)phenyl]propa	ne
	LC50 (96h) mg/ltr.	1.5 mg/ltr (rainbov	v trout)
1319-77-3	cresol (mix)		
	LC50 (96) ppm	19 ppm (Fish)	
12.2 Persis	stence and degradal	bility	
108-65-6	2-methoxy-1-methy	lethyl acetate	90 %
1675-54-3	bis[4-(2,3-epoxypro	opoxy)phenyl]propo	ane 5 %
Method			
108-65-6	2-methoxy-1-methylo	ethyl acetate 83	

- · 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 For information on endocrine disrupting properties see section 11.
- · 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

(Contd. on page 8)

Printing date 12.12.2021 Version number 1.1 (replaces version 1.0) Revision: 12.12.2021

Trade name: AR-N 4340

(Contd. of page 7)

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. (2-methoxy
	methylethyl acetate)
IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (2-methoxy
	methylethyl acetate)
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
•	
Class	3 Flammable liquids.
Label	3
14.4 Packing group	
ADR, IMDG, IATA	III
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Warning: Flammable liquids.
Hazard identification number (Kemler code):	30
EMS Number:	<i>F-E,<u>S-E</u></i>
Stowage Category	A
14.7 Maritime transport in bulk according to IM	10
instruments	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
_	Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	D/E

Printing date 12.12.2021 Version number 1.1 (replaces version 1.0) Revision: 12.12.2021

Trade name: AR-N 4340

(Contd. of page 8)

· IMDG · Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (2-METHOXY- 1-METHYLETHYL ACETATE), 3, III
	** *

## **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)** 716.2-<716.4 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

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

- · 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)

(Contd. on page 10)

Printing date 12.12.2021 Version number 1.1 (replaces version 1.0) Revision: 12.12.2021

Trade name: AR-N 4340

(Contd. of page 9)

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 Acute Tox. 3: Acute toxicity – Category 3 Skin Corr. 1B: Skin corrosion/irritation – Category 1B Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation - Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

GB