

# SAFETY DATA SHEET

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



## Developer AR 600-546

Revision date: 24/2/2016

Version: 3

Language: en-GB,IE

Date of print: 24/2/2016

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

### 1.1 Product identifier

Trade name: Developer AR 600-546

CAS-Number: 628-63-7

EC-number: 211-047-3

EU index number: 607-130-00-2

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

General use: Intermediate for electronic industry Laboratory chemicals

### 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  
Germany  
WWW: [www.allresist.de](http://www.allresist.de)  
E-mail: [info@allresist.de](mailto:info@allresist.de)  
Telephone: +49 (0)33 41-35 93-0  
Telefax: +49 (0)33 41-35 93-29  
Dept. responsible for information:  
Frau Feldt, Email: [doerte.feldt@allresist.de](mailto:doerte.feldt@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)

Flam. Liq. 3; H226 Flammable liquid and vapour.  
(EUH066) Repeated exposure may cause skin dryness or cracking.

### 2.2 Label elements

#### Labelling (CLP)



Signal word: **Warning**

Hazard statements: H226 Flammable liquid and vapour.  
EUH066 Repeated exposure may cause skin dryness or cracking.

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### Precautionary statements:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container to hazardous or special waste collection point.

### Special labelling

Text for labelling: Contains n-Amyl acetate.

### 2.3 Other hazards

Vapours can form explosive mixtures with air.

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Chemical characterisation:

$C_7H_{14}O_2 = CH_3-COO-(CH_2)_4-CH_3$

Amyl acetate

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RTECS-Number: AJ1925000

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- In case of inhalation: Provide fresh air. In case of irregular breathing or respiratory arrest provide artificial respiration. Seek medical attention.
- Following skin contact: After contact with skin, wash immediately with plenty of water. Immediately remove any contaminated clothing, shoes or stockings. Immediately get medical attention.
- After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.
- After swallowing: Give drinking water repeatedly (add medicated carbon as required). Attention in case of vomiting and stomach pumping: danger of aspiration. Accelerate intestinal transit. Castor oil and milk are contraindicated. Seek medical attention.

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

Repeated exposure may cause skin dryness or cracking.

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

Treat symptomatically.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media:

Water fog, carbon dioxide, foam, extinguishing powder

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

Flammable liquid and vapour. In case of fire may be liberated: Carbon monoxide and carbon dioxide.

With air, vapours form potentially explosive mixtures, which are heavier than air.

### 5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Hazchem-Code: •3Y

Do not allow fire water to penetrate into surface or ground water.

## SECTION 6: Accidental release measures

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

Avoid contact with the substance. Immediately remove any contaminated clothing, shoes or stockings.

Provide adequate ventilation. Do not breathe vapour/aerosol.

Wear protective equipment.

### 6.2 Environmental precautions

Do not empty into drains. Danger of explosion!

### 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. Final cleaning.

### 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: Avoid contact with the substance. Immediately remove any contaminated clothing, shoes or stockings.

Do not breathe vapour/aerosol. Provide adequate ventilation, and local exhaust as needed.

Wear protective equipment.

Precautions against fire and explosion:

Keep away from sources of ignition.

Take precautionary measures against static discharges.

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

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place.

Unsuitable materials: various plastics, rubber.

Store only in original container. storage temperature: 10 °C up to 22 °C

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Hints on joint storage: Do not store together with alkali metals, acids, oxidizing agents or nitrates.  
Do not store together with food.

Further details: Do not empty into drains. Danger of explosion!

Storage class: 3 = Flammable liquids

### 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	540 mg/m <sup>3</sup> ; 100 ppm
Europe: IOELV: TWA	270 mg/m <sup>3</sup> ; 50 ppm
Great Britain: WEL-STEL	541 mg/m <sup>3</sup> ; 100 ppm
Great Britain: WEL-TWA	270 mg/m <sup>3</sup> ; 50 ppm
Ireland: 15 minutes	540 mg/m <sup>3</sup> ; 100 ppm IOELV
Ireland: 8 hours	270 mg/m <sup>3</sup> ; 50 ppm IOELV

### 8.2 Exposure controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment. Explosion protection required.

### 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.  
identification colour: brown

Wear self-contained breathing apparatus if circumstances are indefinite or oxygen content is below 17%.

Hand protection: Protective gloves according to EN 374.

Glove material: PE/EVAL/PE

PE= polyethylene; EVAL= ethylene-vinyl-alcohol-copolymer

Breakthrough time: >480 min

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed safety glasses according to EN 166.

Body protection: Flame retardant, antistatic and chemical resistant protective clothing.

General protection and hygiene measures:

Use only non-sparking tools. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

When using do not eat, drink or smoke.

Work place should be equipped with a shower and an eye rinsing apparatus.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Form: liquid Colour: colourless
Odour:	characteristic-banana-like
Odour threshold:	no data available
pH value:	no data available
Melting point/freezing point:	-71 °C
Initial boiling point and boiling range:	149.25 °C
Flash point/flash point range:	41 °C (c.c.)
Evaporation rate:	no data available
Flammability:	Flammable liquid and vapour.
Explosion limits:	LEL (Lower Explosion Limit): 1.10 Vol-% UEL (Upper Explosive Limit): 7.50 Vol-%
Vapour pressure:	at 20 °C: 5.3 hPa
Vapour density:	no data available
Density:	at 20 °C: 0.87 g/cm <sup>3</sup>
Water solubility:	at 20 °C: 10 g/L
Partition coefficient: n-octanol/water:	2.3 log P(o/w) Appreciable bio-accumulation is not to be expected (log P(o/w) 1-3).
Auto-ignition temperature:	no data available
Thermal decomposition:	no data available
Viscosity, dynamic:	no data available
Explosive properties:	Vapours can form explosive mixtures with air.
Oxidizing characteristics:	no data available

### 9.2 Other information

Ignition temperature:	375 °C
Additional information:	Molar mass: 130.21

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Flammable liquid and vapour.  
Vapours can form explosive mixtures with air.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Do not expose to high temperature. Danger of bursting and explosion.

### 10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.  
Protect against direct sunlight.

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### 10.5 Incompatible materials

Do not store together with alkali metals, acids, oxidizing agents or nitrates.  
Unsuitable materials: various plastics, rubber.

### 10.6 Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide and carbon dioxide.  
Thermal decomposition: no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity:

LD50 Rat, oral: 6500 mg/kg

LD50 Rabbit, oral: 7500 mg/kg

Toxicological effects: Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data.

Eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

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.

In case of inhalation: symptoms: Mucous membrane irritation, cough, shortage of breath

After swallowing: symptoms: nausea, vomiting, diarrhoea.

Following skin contact: Repeated exposure may cause skin dryness or cracking.

Defatting properties may induce eczema.

After eye contact: mild irritant

### Symptoms

After absorption of large quantities: narcosis, liver damage.

Possible effects on contact with substance: headache, amyosthenia, dizziness, ataxia (coordination impairment), confusion, cardiac arrhythmias, coma.

After contact with skin: Repeated exposure may cause skin dryness or cracking.

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity:

Algae toxicity: EC0: 120 mg/L

Daphnia toxicity: EC0 Daphnia magna (Big water flea): 180 mg/L

Fish toxicity: LC50: 131 mg/L

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Further details: appreciable bio-accumulation is not to be expected (log P(o/w) : 1\_3)

### 12.2. Persistence and degradability

Further details: no data available

### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

2.3 log P(o/w)

Appreciable bio-accumulation is not to be expected (log P(o/w) 1-3).

### 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 penetrate into soil, waterbodies or drains. Danger of explosion!

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Waste key number: 14 06 03\* = organic solvents, halogen-free  
\* = Evidence for disposal must be provided.

Recommendation: Incinerate according to applicable local, state and federal regulations.

#### Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.  
Non-contaminated packages may be recycled.  
Handle empty containers with care. Incineration may cause explosion.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID, IMDG, IATA: UN 1104

### 14.2 UN proper shipping name

ADR/RID, IMDG, IATA: UN 1104, AMYL ACETATES

### 14.3 Transport hazard class(es)

ADR/RID: Class 3, Code: F1

IMDG: Class 3, Subrisk -

IATA: Class 3

### 14.4 Packing group

ADR/RID, IMDG, IATA: III



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### 14.5 Environmental hazards

Marine pollutant: No

### 14.6 Special precautions for user

#### Land transport (ADR/RID)

Warning board: ADR/RID: Kemmler-number 30, UN number 1104  
Hazard label: 3  
Limited quantities: 5 L  
EQ: E1  
Contaminated packaging - Instructions: P001 IBC03 LP01 R001  
Special provisions for packing together: MP19  
Portable tanks - Instructions: T2  
Portable tanks - Special provisions: TP1  
Tank coding: LGBF  
Tunnel restriction code: D/E

#### Sea transport (IMDG)

EmS: F-E, S-D  
Special provisions: -  
Limited quantities: 5 L  
EQ: E1  
Contaminated packaging - Instructions: P001, LP01  
Contaminated packaging - Provisions: -  
IBC - Instructions: IBC03  
IBC - Provisions: -  
Tank instructions - IMO: -  
Tank instructions - UN: T2  
Tank instructions - Provisions: TP1  
Stowage and handling: Category A.  
Properties and observations: Colourless liquid with pear- or banana-like odour. normal-AMYLACETAT: flashpoint 25°C c.c. sek.-AMYLACETAT: flashpoint 32°C c.c. Immiscible with water.

#### Air transport (IATA)

Hazard: Flammable liquid  
EQ: E1  
Passenger Ltd.Qty.: Pack.Instr. Y344 - Max. Net Qty/Pkg. 10 L  
Passenger: Pack.Instr. 355 - Max. Net Qty/Pkg. 60 L  
Cargo: Pack.Instr. 366 - Max. Net Qty/Pkg. 220 L  
ERG: 3L

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 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: •3Y



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### National regulations - EC member states

Volatile organic compounds (VOC):

100 % by weight = 870 g/L

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



Signal word:

**Warning**

Hazard statements:

EUH066

Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

not applicable

### 15.2 Chemical Safety Assessment

no data available

## SECTION 16: Other information

### Further information

Literature: ICSC 0218

Reason of change: General revision (Regulation (EU) Nr. 2015/830)

Date of first version: 4/3/2015

### Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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.