

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No 453/2010



## Remover AR 300-70 (NEP), AR 300-72 (NEP)

Revision date: 30/3/2015

Version: 5

Language: en-GB,IE

Date of print: 7/4/2015

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

#### 1.1 Product identifier

Trade name: Remover AR 300-70 (NEP), AR 300-72 (NEP)

REACH registration No.: 01-2119472138-36-XXXX

CAS-Number: 2687-91-4

EC-number: 220-250-6

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

General use: Intermediate for electronic industry

#### 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  
E-mail: 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

#### 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 Dam. 1; H318 Causes serious eye damage.

Repr. 1B; H360D May damage the unborn child.

Classification according to directive 67/548/EEC

Repr. Cat. 2; R61 May cause harm to the unborn child.

Xi; R41 Risk of serious damage to eyes.

#### 2.2 Label elements

Labelling (CLP)



Signal word: **Danger**

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Hazard statements: H318 Causes serious eye damage.  
H360D May damage the unborn child.

Precautionary statements:

P202 Do not handle until all safety precautions have been read and understood.  
P281 Use personal protective equipment as required.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P405 Store locked up.  
P501 Dispose of contents/container to hazardous or special waste collection point.

### Labelling (67/548/EEC or 1999/45/EC)



R phrase(s): R 61 May cause harm to the unborn child.  
R 41 Risk of serious damage to eyes.  
S phrase(s): S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S 37 Wear suitable gloves.  
S 39 Wear eye/face protection.

### 2.3 Other hazards

No risks worthy of mention.

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Chemical characterisation:

C6 H11 N O  
1-Ethylpyrrolidin-2-one, N-Ethyl-2-pyrrolidon

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RTECS-Number: UY5769250

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

In case of inhalation: Provide fresh air.  
Following skin contact: Remove residues with water. Change contaminated clothing. Seek medical attention if irritation persists.  
After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently seek the immediate attention of an ophthalmologist.  
After swallowing: Rinse mouth immediately and drink plenty of water.  
If you feel unwell, seek medical advice.

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

In case of inhalation: May cause irritations.

In case of ingestion:

Swallowing may cause gastrointestinal irritation and pain of guts, also by more respiration irritation of the lungs.

After resorption: Nausea, vomiting, cough, Diarrhoea, drowsiness, dizziness.

After eye contact: Causes serious eye damage. Causes tears.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media:

water fog, foam, extinguishing powder, carbon dioxide.

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

Combustible. The vapours of the product are heavier than air.

In case of strong heating: Vapours can form explosive mixtures with air.

In case of fire may be liberated: Carbon monoxide and carbon dioxide, nitrogen oxides (NO<sub>x</sub>).

### 5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus. Wear suitable protective clothing.

Additional information: Hazchem-Code: -

Do not allow fire water to penetrate into surface or ground water. Use water spray jet to knock down vapours.

## SECTION 6: Accidental release measures

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

Avoid contact with the substance. Do not breathe vapour/aerosol.

Ensure adequate ventilation, especially in confined areas.

### 6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

### 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 skin and eyes. Do not breathe vapours.

Provide adequate ventilation, and local exhaust as needed.

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

Requirements for storerooms and containers:

Keep container tightly closed. Storage temperature 10-22 °C.

Storage class: 10 = Combustible liquids, unless storage class 3

### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Additional information: Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

When aerosols and vapours form: Withdraw by suction.

### Personal protection equipment

#### Occupational exposure controls

Respiratory protection: If vapours form, use respiratory protection.

Use filter type A (= against vapours of organic substances) according to EN 14387.

Hand protection: Protective gloves according to EN 374.

Glove material: Butyl caoutchouc (butyl rubber) - Layer thickness: 0,7 mm.

Breakthrough time: >480 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:

Immediately remove any contaminated clothing, shoes or stockings.

Wash hands before breaks and after work.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance: Form: liquid  
Colour: colourless up to yellow

Odour: amine-like

Odour threshold: no data available

pH value: at 23 °C, 100 g/L: 8.2

Melting point/freezing point: -100 °C

Initial boiling point and boiling range: 212.5 °C

Flash point/flash point range: 91 °C (DIN 51758)

Evaporation rate: no data available

Flammability: no data available

Explosion limits: LEL (Lower Explosion Limit): 1.30 Vol-%

UEL (Upper Explosive Limit): 7.70 Vol-%

Vapour pressure: at 32 °C: 0.5 hPa

Vapour density: no data available

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Density: at 20 °C: 0.9974 g/mL  
Water solubility: at 20 °C: soluble  
Partition coefficient: n-octanol/water: -0.04 log P(o/w)  
Bio-accumulation is not to be expected (log P(o/w) <1).  
Auto-ignition temperature: no data available  
Thermal decomposition: no data available  
Viscosity, dynamic: no data available  
Viscosity, kinematic: at 20 °C: 2.1 mm<sup>2</sup>\*s  
Explosive properties: no data available  
Oxidizing characteristics: no data available

### 9.2 Other information

Ignition temperature: 250 °C (DIN 51794)  
Additional information: Molar mass: 113,16 g/mol  
Relative vapour density (air=1): 3,90

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Vapours can form explosive mixtures with air.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Violent reaction with: oxidizing agents, strong acids, strong bases, acid chlorides.

### 10.4 Conditions to avoid

heating

### 10.5 Incompatible materials

see section 10.3

### 10.6 Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide and carbon dioxide, nitrogen oxides (NO<sub>x</sub>).

Thermal decomposition: no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity:

LD50 Rat, oral: 3200 mg/kg  
LD50 Rat, dermal: > 2000 mg/kg (OECD 402)  
LC50 Rat, inhalative: > 5.1 mg/L/4h (OECD 403)

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Toxicological effects: Acute toxicity (oral): Based on available data, the classification criteria are not met. May be harmful if swallowed.  
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): Not an irritant (OECD 404).  
Eye damage/irritation: Eye Dam. 1; H318 = Causes serious eye damage.  
Specific symptoms in animal studies (Rabbit): Strongly irritant (OECD 405).  
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: Repr. 1B; H360D = May damage the unborn child.  
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.

Other information: Further hazardous properties cannot be excluded.

### Symptoms

In case of inhalation: May cause irritations.  
In case of ingestion:  
Swallowing may cause gastrointestinal irritation and pain of guts, also by more respiration irritation of the lungs.  
After resorption: Nausea, vomiting, cough, Diarrhoea, drowsiness, dizziness.  
After eye contact: Causes serious eye damage. Causes tears.

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity: Bacterial toxicity:  
EC50 *Pseudomonas putida*: >1000 mg/L/16h  
Fish toxicity:  
LC50 *Brachydanio rerio* (zebra-fish) 446-999 mg/L/96h (OECD 203).

### 12.2. Persistence and degradability

Further details: Biodegradation: 90-100 %/28 d (OECD 301 A).  
Product is not readily biodegradable.

Oxygen demand:

COD: 2,11 g/g

### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:  
-0.04 log P(o/w)  
Bio-accumulation is not to be expected (log P(o/w) <1).

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### 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\* = organic solvents, halogen-free  
\* = Evidence for disposal must be provided.

Recommendation: Send to a hazardous waste incinerator facility under observation of official regulations.

#### Contaminated packaging

Waste key number: 15 01 07 = Glass 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: not applicable

### 14.2 UN proper shipping name

ADR/RID, IMDG, IATA: Not restricted

### 14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA: not applicable

### 14.4 Packing group

ADR/RID, IMDG, IATA: not applicable

### 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 73/78 and the IBC Code

no data available

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### SECTION 15: Regulatory information

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

##### National regulations - Great Britain

Hazchem-Code: -

#### 15.2 Chemical Safety Assessment

no data available

### SECTION 16: Other information

#### Further information

Reason of change: Changes in section 3.2: substance name, synonyms

Date of first version: 19/8/2010

#### 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.