

# SAFETY DATA SHEET

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



## Remover X AR 300-75/2

Material number X AR 300-75/2

Revision date: 19/4/2018  
Version: 9

Language: en-GB,IE

Date of print: 25/5/2018  
Page: 1 of 10

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

#### 1.1 Product identifier

Trade name: Remover X AR 300-75/2

#### 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  
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)

Met. Corr. 1; H290 May be corrosive to metals.  
Skin Corr. 1A; H314 Causes severe skin burns and eye damage.

#### 2.2 Label elements

##### Labelling (CLP)



Signal word: **Danger**

Hazard statements: H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.

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Precautionary statements: P234 Keep only in original packaging.  
P261 Avoid breathing vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P390 Absorb spillage to prevent material damage.

### Special labelling

Text for labelling: Contains Sodium hydroxide.

### 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: not applicable

### 3.2 Mixtures

Chemical characterisation: Aqueous solution:

Hazardous ingredients:

Ingredient	Designation	Content	Classification
REACH 01-2119457892-27-xxxx EC No. 215-185-5 CAS 1310-73-2	Sodium hydroxide	< 10 %	Met. Corr. 1; H290. Skin Corr. 1A; H314.

Full text of H- and EUH-statements: see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General information: If medical advice is needed, have product container or label at hand. First aider: Pay attention to self-protection!

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention.

Following skin contact: After contact with skin, wash immediately with plenty of water. Take off immediately all 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 seek the immediate attention of an ophthalmologist.

After swallowing: Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Risk of perforation! Immediately get medical attention. Do not try to neutralize.

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

Causes severe skin burns and eye damage.

### 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:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

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

Fires in the immediate vicinity may cause the development of dangerous vapours. In case of fire may be liberated: Sodium compounds. Hydrogen may form upon contact with metals (danger of explosion!).

### 5.3 Advice for firefighters

Special protective equipment for firefighters:

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

Additional information:

Hazchem-Code: 2R

Cool endangered containers with water spray and, if possible, remove from danger zone. Do not breathe fumes. Do not allow fire water to penetrate into surface or ground water. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities. Suppress gases/vapours/mists with water spray jet.

## SECTION 6: Accidental release measures

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

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

### 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. Final cleaning. Never return spills in original containers for re-use. Absorb spillage to prevent material damage.

Additional information:

Special danger of slipping by leaking/spilling product.

### 6.4 Reference to other sections

Refer additionally to section 8 and 13.

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## 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, eyes, and clothing. Do not breathe vapour/aerosol. Wear appropriate protective equipment. When using do not eat, drink or smoke. Do not allow containers to stand open. Handle and open container with care. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse. Work place should be equipped with a shower and an eye rinsing apparatus.

Precautions against fire and explosion:  
Usual measures for fire prevention.

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

Requirements for storerooms and containers:  
May be corrosive to metals. Keep only in original container. Keep container dry, tightly closed and store at cool and aired place. Protect against heat /sun rays.  
Do not use aluminium, tin, or zinc containers.  
May attack plastics.  
Storage temperature: 10 °C up to 22 °C.

Hints on joint storage: Do not store together with strong acids, ammonium compounds, peroxides or metals. Avoid contact with phenols and 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:

CAS No.	Designation	Type	Limit value
1310-73-2	Sodium hydroxide	Great Britain: WEL-STEL Ireland: 15 minutes	2 mg/m <sup>3</sup> 2 mg/m <sup>3</sup>

### 8.2 Exposure controls

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

### Personal protection equipment

#### Occupational exposure controls

Respiratory protection: When aerosols and vapours form:  
Use appropriate respiratory protection. Particulates filter P2 according to EN 143.

Hand protection: Protective gloves according to EN 374.  
Glove material: Nitrile rubber - Layer thickness: 0.11 mm.  
Breakthrough time:  $\geq$  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.

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General protection and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not breathe vapour/aerosol. When using do not eat, drink or smoke.

Wash hands before breaks and after work. Take off immediately all contaminated clothing and wash it before reuse. Work place should be equipped with a shower and an eye rinsing apparatus.

### 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, clear
Odour:	odourless
Odour threshold:	No data available
pH value:	13.8
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	Not combustible
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Density:	at 20 °C: 1.08 g/mL
Water solubility:	at 20 °C: soluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing characteristics:	No data available

### 9.2 Other information

Additional information: No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

May be corrosive to metals.

Hydrogen may form upon contact with light metals (danger of explosion!).

### 10.2 Chemical stability

Stable under recommended storage conditions.

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### 10.3 Possibility of hazardous reactions

Reacts with ammonium compounds: formation of ammonia.  
Violent reaction with strong acids, organic nitro compounds, magnesium, cyanides, metals.

### 10.4 Conditions to avoid

Excessive heating.

### 10.5 Incompatible materials

Strong acids, Metals, aluminium, tin, zinc, phenols, various plastics, cyanides, nitrile, organic nitro compounds, 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

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.  
Acute toxicity (oral): Lack of data.  
Acute toxicity (dermal): Lack of data.  
Acute toxicity (inhalative): Lack of data.  
Skin corrosion/irritation: Skin Corr. 1A; H314 = Causes severe skin burns and eye damage.  
Serious 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.

Other information: Information about Sodium hydroxide:  
LD50 Rabbit, oral: 325 mg/kg

### Symptoms

If swallowed, severe burns in the oral cavity and throat as well as danger of perforation of the digestive tract and stomach.  
Other symptoms: Mucous membrane irritation, necrosis, Cough, shortage of breath, death, collapse and Danger of loss of sight!.

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## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity: Harmful effects on water organisms by modification of pH-value.  
Information about Sodium hydroxide:  
Fish toxicity:  
LC50 *Gambusia affinis* (Mosquitofish): 125 mg/L/96h  
Daphnia toxicity:  
EC50 *Daphnia magna* (Big water flea): 76 mg/L24h  
Bacterial toxicity:  
EC50 *Photobacterium phosphoreum*: 22 mg/L48h

### 12.2 Persistence and degradability

Further details: The methods for determining the biological degradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential

Bioconcentration factor (BCF):  
no data available

### 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: 06 02 04\* = Sodium and potassium hydroxide, solution  
\* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable local, state, and federal regulations governing corrosive liquids.  
Do not dispose of with household waste.

#### Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.  
Handle contaminated packages in the same way as the substance itself.  
Non-contaminated packages may be recycled.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID, IMDG, IATA-DGR:  
UN 1824

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### 14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 1824, SODIUM HYDROXIDE SOLUTION

### 14.3 Transport hazard class(es)

ADR/RID: Class 8, Code: C5  
IMDG: Class 8, Subrisk -  
IATA-DGR: Class 8



### 14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

II

### 14.5 Environmental hazards

Marine pollutant: no

### 14.6 Special precautions for user

#### Land transport (ADR/RID)

Warning board: ADR/RID: Kemmler-number 80, UN number UN 1824  
Hazard label: 8  
Limited quantities: 1 L  
EQ: E2  
Contaminated packaging - Instructions: P001 IBC02  
Special provisions for packing together: MP15  
Portable tanks - Instructions: T7  
Portable tanks - Special provisions: TP2  
Tank coding: L4BN  
Tunnel restriction code: E

#### Sea transport (IMDG)

EmS: F-A, S-B  
Special provisions: -  
Limited quantities: 1 L  
Excepted quantities: E2  
Contaminated packaging - Instructions: P001  
Contaminated packaging - Provisions: -  
IBC - Instructions: IBC02  
IBC - Provisions: -  
Tank instructions - IMO: -  
Tank instructions - UN: T7  
Tank instructions - Provisions: TP2  
Stowage and handling: Category A.  
Segregation: SG35  
Properties and observations: Colourless liquid. Corrosive to aluminium, zinc and tin. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.  
Segregation group: 18

#### Air transport (IATA)

Hazard label: Corrosive  
Excepted Quantity Code: E2  
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y840 - Max. Net Qty/Pkg. 0.5 L  
Passenger and Cargo Aircraft: Pack.Instr. 851 - Max. Net Qty/Pkg. 1 L  
Cargo Aircraft only: Pack.Instr. 855 - Max. Net Qty/Pkg. 30 L  
Special provisions: A3 A803  
Emergency Response Guide-Code (ERG): 8L



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### 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: 2R  
No data available

#### National regulations - EC member states

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



Signal word: **Danger**

Hazard statements: H314 Causes severe skin burns and eye damage.  
Precautionary statements: P261 Avoid breathing vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3

### 15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

## SECTION 16: Other information

### Further information

Wording of the H-phrases under paragraph 2 and 3:

H290 = May be corrosive to metals.

H314 = Causes severe skin burns and eye damage.

Reason of change: Changes in section 2: Labelling  
Changes in section 15: Regulatory information  
General revision

Date of first version: 23/8/2010

### Department issuing data sheet

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

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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.

