

SAFETY DATA SHEET

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



Thinner AR 600-01

Material number AR 600-01

Revision date: 2/10/2017
Version: 7

Language: en-GB,IE

Date of print: 25/10/2017
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Thinner AR 600-01
REACH registration No.: 01-2119432722-45-XXXX

CAS-Number: 108-90-7
EC-number: 203-628-5
EU index number: 602-033-00-1

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)

Flam. Liq. 3; H226 Flammable liquid and vapour.
Acute Tox. 4; H332 Harmful if inhaled.
Skin Irrit. 2; H315 Causes skin irritation.
Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects. M-factor = 1

2.2 Label elements

Labelling (CLP)



Signal word:

Warning

Hazard statements: H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements: P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P312	Call a POISON CENTER/doctor if you feel unwell.
P403+P235	Store in a well-ventilated place. Keep cool.

Special labelling

Text for labelling: Contains Chlorobenzene.

2.3 Other hazards

Potentially explosive mixtures may form if adequate ventilation is not provided.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.
Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

SECTION 3: Composition / information on ingredients

3.1 Substances

Chemical characterisation: C6 H5 Cl, Chlorobenzene
CAS-Number: 108-90-7
EC-number: 203-628-5
EU index number: 602-033-00-1
RTECS-Number: CZ0175000

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:	IF exposed or concerned: Get medical advice/attention. If medical advice is needed, have product container or label at hand. First aider: Pay attention to self-protection!
In case of inhalation:	Move victim to fresh air, put at rest and loosen restrictive clothing. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Immediately get medical attention.
Following skin contact:	Immediately clean with water and soap followed by thorough rinsing. Take off immediately all contaminated clothing and wash it before reuse. In case of skin irritation, 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. In case of eye irritation consult 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. Danger of aspiration! Keep airway open. Immediately get medical attention.

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4.2 Most important symptoms and effects, both acute and delayed

Harmful if inhaled. Causes skin irritation.

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:

Foam, extinguishing powder, water fog, carbon dioxide.
In case of large fires: Foam or water fog.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

Flammable liquid and vapour.
With air, vapours form potentially explosive mixtures, which are heavier than air.
Vapours may proceed on the ground over great distances and cause fire and backflashes.
May form dangerous gases and vapours in case of fire.
Furthermore, there may develop: Hydrogen chloride, phosgene, 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: 2Y

Heating will lead to pressure increase: Danger of bursting and explosion. Keep containers cool with water spray.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Eliminate all ignition sources if safe to do so. Avoid contact with the substance.

Wear appropriate protective equipment. Keep unprotected people away. Do not breathe vapour/aerosol/mist.

Ensure adequate ventilation, especially in confined areas. If possible, eliminate leakage.

Cordon off downwind area at risk and warn inhabitants.

Avoid aerosol and mist formation.

6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains. Danger of explosion!

In case of release, notify competent authorities.

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6.3 Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).
Beware of reignition. Thoroughly clean surrounding area.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information: Use explosion-proof equipment and non-sparking tools/utensils.
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 aerosol and mist formation. Do not breathe vapour/aerosol/mist.
Do not get in eyes, on skin, or on clothing. Take off immediately all contaminated clothing and wash it before reuse.
Wear appropriate protective equipment. Work place should be equipped with a shower and an eye rinsing apparatus.

Precautions against fire and explosion: Keep away from heat sources, sparks and open flames. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Do not weld. Use only spark proof tools. Use only explosion-proof equipment.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers: Keep container tightly closed in a cool, well-ventilated place.
Keep container dry. Keep only in the original container.
Handle and open container with care. Keep away from sources of ignition and heat.
Protect from direct sunlight.
storage temperature 10 - 22 °C.

Hints on joint storage: Do not store together with oxidizing agents.
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	70 mg/m ³ ; 15 ppm
Europe: IOELV: TWA	23 mg/m ³ ; 5 ppm
Great Britain: WEL-STEL	14 mg/m ³ ; 3 ppm (May be absorbed through the skin.)
Great Britain: WEL-TWA	4.7 mg/m ³ ; 1 ppm (May be absorbed through the skin.)
Ireland: 15 minutes	70 mg/m ³ ; 15 ppm
Ireland: 8 hours	23 mg/m ³ ; 5 ppm

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DNEL/DMEL: Systemic effects:
DNEL workers, long-term, inhalative: 23 mg/m³
DNEL workers, short-term, inhalative: 70 mg/m³
DNEL workers, long-term, dermal: 5 mg/kg bw/d
DNEL workers, short-term, dermal: 15 mg/kg bw/d
DNEL consumers, long-term, inhalative: 1 mg/m³
DNEL consumers, long-term, dermal: 3 mg/kg bw/d
DNEL consumers, short-term, dermal: 3 mg/kg bw/d
DNEL consumers, long-term, oral: 3 mg/kg bw/d
DNEL consumers, short-term, oral: 3 mg/kg bw/d

PNEC: PNEC water (freshwater): 0.032 mg/L
PNEC water (marine water): 0.0032 mg/L
PNEC sewage treatment plant: 1.4 mg/L
PNEC sediment (freshwater): 0.922 mg/kg dw
PNEC sediment (marine water): 0.0922 mg/kg dw
PNEC floor: 0.166 mg/kg dw

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 a breathing protection against vapours/aerosol. Use filter type A (= against vapours of organic substances) according to EN 14387.

Hand protection: Protective gloves according to EN 374.
Glove material: Fluororubber (Viton) - Layer thickness: 0.7 mm.
Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Unsuitable materials: natural rubber, nitrile rubber, butyl caoutchouc (butyl rubber), PVC.

Eye protection: Tightly sealed goggles according to EN 166.

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

General protection and hygiene measures:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapour/aerosol/mist.
Avoid contact with skin, eyes, and clothing. Take off immediately all contaminated clothing and wash it before reuse.
When using do not eat or drink. Wash hands before breaks and after work.
Work place should be equipped with a shower and an eye rinsing apparatus.

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: characteristic

Odour threshold: No data available

pH value: No data available

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Melting point/freezing point:	-46 °C
Initial boiling point and boiling range:	132 °C (1013 hPa)
Flash point/flash point range:	28 °C (c.c.)
Evaporation rate:	No data available
Flammability:	Flammable liquid and vapour.
Explosion limits:	LEL (Lower Explosion Limit): 1.30 Vol-% UEL (Upper Explosive Limit): 11.00 Vol-%
Vapour pressure:	at 20 °C: 11.73 hPa
Vapour density:	3.9
Density:	at 20 °C: 1.11 g/mL
Water solubility:	at 20 °C: 0.207 g/L
Partition coefficient: n-octanol/water:	3 log P(o/w) Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.
Auto-ignition temperature:	No data available
Decomposition temperature:	> 132 °C
Viscosity, dynamic:	at 20 °C: 0.756 mPa*s
Explosive properties:	Vapours can form explosive mixtures with air.
Oxidizing characteristics:	No data available

9.2 Other information

Ignition temperature:	590 °C
Additional information:	Molar mass: 112.56 g/mol

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

Heating will lead to pressure increase: Danger of bursting and explosion.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Oxidising agent

10.6 Hazardous decomposition products

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

Thermal decomposition: > 132 °C

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: LD50 Rat, oral: > 2000 mg/kg (OECD 401)
LC50 Rat, inhalative (vapour): 29.7 mg/L/4h (OECD 403)

Toxicological effects: Acute toxicity (oral): Based on available data, the classification criteria are not met.
Acute toxicity (dermal): Lack of data.
Acute toxicity (inhalative): Acute Tox. 4; H332 = Harmful if inhaled.
Skin corrosion/irritation: Skin Irrit. 2; H315 = Causes skin irritation.
Rabbit: mild irritant (OECD 404). Danger of cutaneous absorption.
Eye damage/irritation: Based on available data, the classification criteria are not met.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Based on available data, the classification criteria are not met.
Guinea pig: negative (OECD 406).
Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.
Ames test: negative (OECD 471).
mammals: Cells: negative (OECD 476).
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
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.

Symptoms

Systemic effects: CNS disorders, tachycardia, blood pressure drop, agitation, spasms, ataxia (coordination impairment), narcosis, liver and kidney damage.
In case of inhalation:
Headache, mucous membrane irritation, fatigue, unconsciousness, narcosis.
Risk of resorption.
In case of ingestion: May be harmful if swallowed.
Pain, vomiting (Danger of aspiration!), diarrhoea.
After contact with skin: Defatting properties may induce eczema.
After eye contact: May cause irritations.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.

Algae toxicity:
IC50 Pseudokirchneriella subcapitata (green algae): 11.4 mg/L/72h (OECD 201).

Daphnia toxicity:
EC50 Daphnia magna (Big water flea): 0.59 mg/L/48h (OECD 202).

Fish toxicity:
LC50 Lepomis macrochirus (bluegill): 4.5 - 7.4 mg/L/96h.

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12.2 Persistence and degradability

Further details: Biodegradability:
15 %/ 28 d (OECD 301 F). Product is not readily biodegradable.
Adsorption coefficient KOC: 275 L/kg

Effects in sewage plants: Bacterial toxicity:
EC50 activated sludge: 140 mg/L/30min. (OECD 209).

12.3 Bioaccumulative potential

Bioconcentration factor (BCF):
40

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Other adverse effects

AOX reference: The product contains organically bound halogen. Thus it may add to the AOX value.
General information: Do not allow to enter into ground-water, surface water or drains.
In case of spills of large quantities: Danger to drinking water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 07 07 03* = Organic solvents, halogenated
* = Evidence for disposal must be provided.

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

Contaminated packaging

Recommendation: Handle empty containers with care. Incineration may cause explosion. 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 1134

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:
UN 1134, CHLOROBENZENE

14.3 Transport hazard class(es)

ADR/RID: Class 3, Code: F1
IMDG: Class 3, Subrisk-
IATA-DGR: Class 3



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14.4 Packing group

ADR/RID, IMDG, IATA-DGR:
III

14.5 Environmental hazards

Marine pollutant: yes

14.6 Special precautions for user

Land transport (ADR/RID)

Warning board: ADR/RID: Kemmler-number 30, UN number UN 1134
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
Excepted quantities: 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 an almond-like odour. Flashpoint: 29°C c.c. Explosive limits: 1.3 to 11%. Immiscible with water.
Segregation group: 10

Air transport (IATA)

Hazard label: Flamm. liquid
Excepted Quantity Code: E1
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y344 - Max. Net Qty/Pkg. 10 L
Passenger and Cargo Aircraft: Pack.Instr. 355 - Max. Net Qty/Pkg. 60 L
Cargo Aircraft only: Pack.Instr. 366 - Max. Net Qty/Pkg. 220 L
Emergency Response Guide-Code (ERG): 3L

14.7 Transport in bulk according to Annex II of Marpol 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: 2Y
No data available

National regulations - EC member states

Volatile organic compounds (VOC):
100 % by weight

Labelling of packaging with <= 125mL content



Signal word: **Warning**
Hazard statements: not applicable
Precautionary statements: not applicable

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other information

Further information

Reason of change: Changes in section 2: classification, labelling
General revision
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.

