



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 1 of 12

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

1.1 Product identifier

Trade name: X AR 300-74/5

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
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
Department responsible for information:
Frau Dr. Zimmermann, Email: produktion@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. 2; H225	Highly flammable liquid and vapour.
Acute Tox. 4; H332	Harmful if inhaled.
Skin Irrit. 2; H315	Causes skin irritation.
STOT SE 3; H336	May cause drowsiness or dizziness.
STOT RE 2; H373	May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1; H304	May be fatal if swallowed and enters airways.
Aquatic Acute 1; H400	Very toxic to aquatic life.
Aquatic Chronic 1; H410	Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (CLP)



Signal word:

Danger



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 2 of 12

Hazard statements: H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P314 Get medical advice/attention if you feel unwell.
P331 Do NOT induce vomiting.
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Special labelling

Text for labelling: Contains: Ethylbenzene, Octane.

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:

No data available

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EC No. 202-849-4 CAS 100-41-4	Ethylbenzene	35 - 65 %	Flam. Liq. 2; H225. Acute Tox. 4; H332. STOT RE 2; H373. Asp. Tox. 1; H304.
EC No. 203-892-1 CAS 111-65-9	Octane	35 - 65 %	Flam. Liq. 2; H225. Skin Irrit. 2; H315. STOT SE 3; H336. Asp. Tox. 1; H304. Aquatic Acute 1; H400 (M-factor = 1). Aquatic Chronic 1; H410 (M-factor = 1).

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



SAFETY DATA SHEET

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

Revision date: 11/3/2020

Version: 2

Language: en-GB,IE

Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 3 of 12

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: 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 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 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. Immediately get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May be fatal if swallowed and enters airways.
Causes skin irritation. Harmful if inhaled. May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.

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:

Extinguishing powder, foam, water spray jet or carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour. On heating or in case of fire toxic gases may form. 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. Furthermore, there may develop: 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.



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 4 of 12

Additional information: Hazchem-Code: •3YE
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

Do not breathe mist/vapours/spray. Avoid contact with the substance.
Eliminate all ignition sources if safe to do so. If possible, eliminate leakage. Provide adequate ventilation.
Wear appropriate protective equipment. Take off immediately all contaminated clothing and wash it before reuse. Keep unprotected people away.
Cordon off downwind area at risk and warn inhabitants.

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.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal. In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).
Never return spills in original containers for re-use.

Additional information: 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. Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.
Work place should be equipped with a shower and an eye rinsing apparatus.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharge.
Use only explosion-protected equipment/instruments. Do not weld.
In partially filled containers explosive mixtures may form.



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 5 of 12

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

- Keep container tightly closed and in a well-ventilated place.
- Keep container dry. Keep only in the original container.
- Protect from heat and direct sunlight.
- Store containers in upright position.

Hints on joint storage:

- Keep away from food, drink and animal feedingstuffs.
- Do not store together with acids and strong oxidation agents.

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
100-41-4	Ethylbenzene	Europe: IOELV: STEL	884 mg/m ³ ; 200 ppm (may be absorbed through the skin)
		Europe: IOELV: TWA	442 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		Great Britain: WEL-STEL	552 mg/m ³ ; 125 ppm (may be absorbed through the skin)
		Great Britain: WEL-TWA	441 mg/m ³ ; 100 ppm (may be absorbed through the skin)
		Ireland: 15 minutes	884 mg/m ³ ; 200 ppm (may be absorbed through the skin)
		Ireland: 8 hours	442 mg/m ³ ; 100 ppm (may be absorbed through the skin)
111-65-9	Octane	Ireland: 8 hours	1450 mg/m ³ ; 300 ppm

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.
- Hand protection: Protective gloves according to EN 374.
Glove material: Nitrile rubber
Breakthrough time: > 480 min.
Layer thickness: 0.4 mm
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- Eye protection: Tightly sealed goggles according to EN 166.
- Body protection: Flame retardant, antistatic and chemical resistant protective clothing.



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 6 of 12

General protection and hygiene measures:

Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing.
Take off contaminated clothing and wash it before reuse.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
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:	No data available
Odour threshold:	No data available
pH value:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	> 125 °C (Octane)
Flash point/flash point range:	15 °C (Octane)
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	LEL (Lower Explosion Limit): 0.96 Vol-% UEL (Upper Explosive Limit): 6.70 Vol-%
Vapour pressure:	No data available
Vapour density:	No data available
Density:	at 25 °C: 0.703 - 0.870 g/mL
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	> 220 °C (Octane)
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

Highly 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.



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 7 of 12

10.4 Conditions to avoid

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

10.5 Incompatible materials

Strong oxidizing agents, strong acids.

10.6 Hazardous decomposition products

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): Acute Tox. 4; H332 = Harmful if inhaled.

Skin corrosion/irritation: Skin Irrit. 2; H315 = Causes skin irritation.

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): STOT SE 3; H336 = May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): STOT RE 2; H373 = May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Asp. Tox. 1; H304 = May be fatal if swallowed and enters airways.

Other information: Information about Ethylbenzene:

LD50 Rat, oral: 3,500 mg/kg

LD50 Rabbit, dermal: 15,433 mg/kg

Information about Octane:

LD50 Rat, inhalative: 118,000 mg/kg/4h



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 8 of 12

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Information about Ethylbenzene:
Fish toxicity:
LC50 *Oncorhynchus mykiss*: 4.2 mg/L/96h
Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): 1.8 - 2.4 mg/L/48h
Algae toxicity:
EC50 *Skeletonema costatum*: 4.9 mg/L/72h
Information about Octane:
Fish toxicity:
LC50 *Oryzias latipes*: 0.42 mg/L/96h
Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): 0.38 mg/L/48h
Algae toxicity:
EC50 *Pseudokirchneriella subcapitata* (green algae): 5.8 mg/L/72h

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:
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: 07 01 04* = other organic solvents, washing liquids and mother liquors
* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.
Do not dispose of with household waste.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation. Handle empty containers with care.
Incineration may cause explosion.
Handle contaminated packages in the same way as the substance itself.



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 9 of 12

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:

UN 1993

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 1993, FLAMMABLE LIQUID, N.O.S. (Ethylbenzene, Octane)

14.3 Transport hazard class(es)

ADR/RID:

Class 3, Code: F1

IMDG:

Class 3, Subrisk -

IATA-DGR:

Class 3



14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

II



14.5 Environmental hazards

Marine pollutant:

yes

14.6 Special precautions for user

Land transport (ADR/RID)

Warning board:

ADR/RID: Kemmler-number 33, UN number UN 1993

Hazard label:

3

Special provisions:

274 601 640D

Limited quantities:

1 L

EQ:

E2

Contaminated packaging - Instructions:

P001 IBC02 R001

Special provisions for packing together:

MP19

Portable tanks - Instructions:

T7

Portable tanks - Special provisions:

TP1 TP8 TP28

Tank coding:

LGBF

Tunnel restriction code:

D/E

Sea transport (IMDG)

EmS:

F-E, S-E

Special provisions:

274

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:

TP1, TP8, TP28

Stowage and handling:

Category B.

Properties and observations:

-

Segregation group:

none



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 10 of 12

Air transport (IATA)

Hazard label: Flamm. liquid
Excepted Quantity Code: E2
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y341 - Max. Net Qty/Pkg. 1 L
Passenger and Cargo Aircraft: Pack.Instr. 353 - Max. Net Qty/Pkg. 5 L
Cargo Aircraft only: Pack.Instr. 364 - Max. Net Qty/Pkg. 60 L
Special provisions: A3
Emergency Response Guide-Code (ERG): 3H

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: •3YE
No data available

National regulations - EC member states

Labelling of packaging with <= 125mL content



Signal word: **Danger**

Hazard statements: H304 May be fatal if swallowed and enters airways.

Precautionary Statements: P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3, 40
Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: annex I, part 1, P5c, E1.

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 11 of 12

SECTION 16: Other information

Further information

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

- H225 = Highly flammable liquid and vapour.
- H304 = May be fatal if swallowed and enters airways.
- H315 = Causes skin irritation.
- H332 = Harmful if inhaled.
- H336 = May cause drowsiness or dizziness.
- H373 = May cause damage to organs through prolonged or repeated exposure.
- H400 = Very toxic to aquatic life.
- H410 = Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- OEL: Occupational Exposure Limit Value
- AS/NZS: Australian Standards/New Zealand Standards
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- CLP: Classification, Labelling and Packaging
- DMEL: Derived minimal effect level
- DNEL: Derived no-effect level
- EC50: Effective Concentration 50%
- EC: European Community
- EN: European Standard
- EU: European Union
- IATA: International Air Transport Association
- IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- IMDG Code: International Maritime Dangerous Goods Code
- LC50: Median lethal concentration
- LD50: Lethal dose 50%
- LEL: Lower Explosion Limit
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- M-factor: Multiplication factor
- OSHA: Occupational Safety and Health Administration
- PBT: Persistent, bioaccumulative and toxic
- PNEC: Predicted no-effect concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- STOT RE: Specific target organ toxicity - repeated exposure
- STOT SE: Specific target organ toxicity - single exposure
- TLV: Threshold Limit Value
- UN: United Nations
- vPvB: Very persistent and very bioaccumulative
- WEL: Workplace Exposure Limit

Reason of change: Changes in section 9: Flash point
Date of first version: 15/2/2019



SAFETY DATA SHEET

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

Revision date: 11/3/2020
Version: 2
Language: en-GB,IE
Date of print: 28/8/2020

X AR 300-74/5

Material number X AR 300-74/5

Page: 12 of 12

Department issuing data sheet

Contact person: see section 1: Department responsible for information

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.