

SAFETY DATA SHEET

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



Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 1 of 10

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

1.1 Product identifier

Trade name: Protective Coating Series AR-PC 5040

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

General use: Intermediate for electronic industry
For industrial purposes only

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.

2.2 Label elements

Labelling (CLP)



Signal word:

Warning

Hazard statements: H226 Flammable liquid and vapour.

Precautionary statements: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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].

P403+P235 Store in a well-ventilated place. Keep cool.

SAFETY DATA SHEET

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



Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 2 of 10

Special labelling

EUH208

Contains Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700). May produce an allergic reaction.

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

Chemical characterisation: Mixture of the substances listed below with non-hazardous additions:

Hazardous ingredients:

Ingredient	Designation	Content	Classification
REACH 01-2119968918-13-xxxx EC No. 202-876-1 CAS 100-66-3	Anisole	75 - 90 %	Flam. Liq. 3; H226.
EC No. 500-033-5 CAS 25068-38-6	Reaction product: Bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	0.1 - 3 %	Skin Irrit. 2; H315. Eye Irrit. 2; H319. Skin Sens. 1; H317. Aquatic Chronic 2; H411.

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 exposed or concerned: Get medical advice/attention. First aider: Pay attention to self-protection!
- In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Make sure he/she is warm and comfortable. Seek medical attention. If victim is at risk of losing consciousness, position and transport on their side.
- Following skin contact: Remove residues with soap and 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 consult an ophthalmologist.
- After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth immediately and drink plenty of water.
Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause allergic reactions in already sensitized persons. Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.

SAFETY DATA SHEET

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Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 3 of 10

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 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

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. On heating or in case of fire toxic gases may form. In case of fire may be liberated: 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: 3Y

Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers. 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 vapour/aerosol. 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. Keep unprotected people away. Cordon off downwind area at risk and warn inhabitants. Take off immediately all contaminated clothing and wash it before reuse.

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

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). Never return spills in original containers for re-use.

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.

SAFETY DATA SHEET

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Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 4 of 10

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 vapour/aerosol. 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. When handling large quantities, supply emergency spray.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting equipment. Do not weld. In partially filled containers explosive mixtures may form.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Store in a well-ventilated place. Keep container tightly closed. Store in a dry place. Store in a closed container. Keep only in original container. Protect from heat and direct sunlight. Store containers in upright position.
Storage temperature: 18 °C up to 25 °C

Hints on joint storage:

Do not store together with strong oxidizing agents, strong acids, alkalis or formaldehyde. 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

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

DNEL/DMEL:

Information about Anisole:
Systemic effects:
DNEL long-term, workers, inhalative: 20 mg/m³

PNEC:

Information about Anisole:
PNEC water (freshwater): 0.027 mg/L
PNEC water (marine water): 0.0027 mg/L
PNEC water (intermittent release): 0.27 mg/L
PNEC water (freshwater sediment): 0.745 mg/kg
PNEC water (marine sediment): 0.0745 mg/kg
PNEC soil: 0.133 mg/kg
PNEC sewage treatment plant: 30 mg/L

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:

When aerosols and vapours form: Use appropriate respiratory protection. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.

SAFETY DATA SHEET

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



Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 5 of 10

Hand protection: Protective gloves according to EN 374.
Glove material:
During full contact: Fluororubber (Viton) - Layer thickness: 0.70 mm.
Breakthrough time: >480 min.
During splash contact: Nitrile rubber - Layer thickness: 0.40 mm.
Breakthrough time: >30 min.
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.

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. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Take off immediately all contaminated clothing and wash it before reuse. When using do not eat or drink. Wash hands thoroughly after handling. When handling large quantities, supply emergency spray.

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

Odour: aromatic
Odour threshold: No data available

pH value: at 20 °C: not applicable (Anisole)

Melting point/freezing point: -37 °C (Anisole)
Initial boiling point and boiling range: 154 °C (Anisole)
Flash point/flash point range: 45.5 °C (Anisole)
Evaporation rate: No data available

Flammability: Flammable liquid and vapour.
Explosion limits: LEL (Lower Explosion Limit): 0.34 Vol-% (Anisole)
UEL (Upper Explosive Limit): 6.30 Vol-% (Anisole)

Vapour pressure: at 20 °C: 3.2 hPa (Anisole)
Vapour density: 3.7 (Anisole)
Density: at 20 °C: 0.994 g/mL (Anisole)
Water solubility: at 20 °C: 1.71 g/L (Anisole)
Partition coefficient: n-octanol/water: 2.62 log P(o/w) (Anisole)
Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

Auto-ignition temperature: No data available
Decomposition temperature: > 490 °C (Anisole).
Viscosity, dynamic: at 25 °C: 0.99 mPa*s (Anisole)

Explosive properties: Vapours can form explosive mixtures with air.
Oxidizing characteristics: No data available

9.2 Other information

Ignition temperature: 475 °C (Anisole)

SAFETY DATA SHEET

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



Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 6 of 10

Refraction index: at 20 °C: 1.518 (Anisole)

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.
Peroxide may form when product is exposed to light and air.
Violent reaction with strong oxidizing agents, strong acids, alkalis and formaldehyde.

10.4 Conditions to avoid

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

10.5 Incompatible materials

Strong oxidizing agents, strong acids, alkalis and formaldehyde.

10.6 Hazardous decomposition products

Peroxides.

Thermal decomposition: > 490 °C (Anisole).

SAFETY DATA SHEET

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



Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 7 of 10

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): Based on available data, the classification criteria are not met. ATEmix (calculated) > 2000 mg/kg.
Acute toxicity (dermal): Based on available data, the classification criteria are not met. ATEmix (calculated) > 2000 mg/kg.
Acute toxicity (inhalative): Based on available data, the classification criteria are not met. ATEmix calculated (Vapours): > 20 mg/L
Skin corrosion/irritation: Lack of data.
Eye damage/irritation: Lack of data.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Based on available data, the classification criteria are not met.
Contains Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700). May produce an allergic reaction.
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 Anisole:
LD50 Rat, oral: > 3700 mg/kg. (RTECS)
LD50 Rabbit, dermal > 5000 mg/kg bw/24h
LC50 Rat, Rat, inhalative (vapours): > 6.51 mg/kg. (OECD 403)

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Information about Anisole:
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): 27 mg/L/48h (OECD 202)
Fish toxicity:
LC50 Leuciscus idus: >1000 mg/L/96h
Algae toxicity:
ErC50 Selenastrum capricornutum: 47 mg/l/72h (OECD 201)

12.2 Persistence and degradability

Further details: Information about Anisole:
Biodegradability: approx. 68 % (OECD 301 D).
Easily bio-degradable

Effects in sewage plants: Information about Anisole:
NOEC activated sludge: 300 mg/L/3h (OECD 209)

SAFETY DATA SHEET

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Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 8 of 10

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

2.62 log P(o/w) (Anisole)

Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

AOX reference: Information about Anisole:
Henry constant: 446 Pa*m³/mol

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* = Wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals.

* = 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. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:
UN 2222

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:
UN 2222, ANISOLE

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:
III



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Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 9 of 10

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 UN 2222
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 to yellow liquid. Flashpoint: 41°C c.c. Explosive limits: 0,3% to 6,3%. Immiscible with water. Irritating to skin, eyes and mucous membranes.
Segregation group: none

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

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
No data available

SAFETY DATA SHEET

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



Protective Coating Series AR-PC 5040

Material number AR-PC 5040

Revision date: 26/10/2017
Version: 1

Language: en-GB,IE

Date of print: 27/10/2017
Page: 10 of 10

National regulations - EC member states

Volatile organic compounds (VOC):
83 % by weight

Labelling of packaging with <= 125mL content



Signal word:

Warning

Hazard statements: not applicable

Precautionary statements: P280 Wear protective gloves/protective clothing/eye protection.

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:

H226 = Flammable liquid and vapour.

H315 = Causes skin irritation.

H317 = May cause an allergic skin reaction.

H319 = Causes serious eye irritation.

H411 = Toxic to aquatic life with long lasting effects.

EUH208 = Contains Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin
(number average molecular weight <=700). May produce an allergic reaction.

Date of first version: 26/10/2017

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.

