



# SAFETY DATA SHEET

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

Revision date: 23/1/2019

Version: 5

Language: en-GB,IE

Date of print: 28/8/2020

## Protective Coating AR-PC 5090.02 & 5091.02

Material number AR-PC 5090.02 & 5091.02

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

#### 1.1 Product identifier

Trade name: Protective Coating AR-PC 5090.02 & 5091.02

#### 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](http://www.allresist.de)  
E-mail: [info@allresist.de](mailto: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](mailto: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. 3; H226 Flammable liquid and vapour.  
Eye Irrit. 2; H319 Causes serious eye irritation.  
STOT SE 3; H336 May cause drowsiness or dizziness.

#### 2.2 Label elements

##### Labelling (CLP)



Signal word:

**Warning**

Hazard statements: H226 Flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.



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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.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P501 Dispose of contents/container to hazardous or special waste collection point.

### Special labelling

Text for labelling: Contains Isopropyl alcohol.

### 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: Aqueous solution. Mixture of the substance mentioned below with non-hazardous additions.

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EC No. 200-661-7 CAS 67-63-0	Isopropyl alcohol	< 30 %	Flam. Liq. 2; H225. Eye Irrit. 2; H319. STOT SE 3; H336.

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. 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; if necessary, provide artificial respiration or oxygen. Seek medical attention.
- Following skin contact: Immediately remove any contaminated clothing, shoes or stockings. Remove residues with soap and water. 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.



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After swallowing: Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person.  
Do not induce vomiting. Seek medical attention.

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

Causes serious eye irritation. May cause drowsiness or dizziness.  
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.

Information about Isopropyl alcohol:

Attention in case of vomiting and stomach pumping: danger of aspiration. Accelerate intestinal transit. Rinse mouth immediately and drink plenty of water. Give sodium sulfate as laxative (1 tablespoon in 1 glass of water) with plenty of activated coal. Otherwise, continue with symptomatic treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, extinguishing powder, 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.

May form dangerous gases and vapours in case of fire. 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.

Move undamaged containers from immediate hazard area if it can be done safely.

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.



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### SECTION 6: Accidental release measures

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

Eliminate all ignition sources if safe to do so. If possible, eliminate leakage.  
Avoid contact with the substance. Do not breathe vapours.  
Wear appropriate protective equipment. Provide fresh air. 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

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. Do not breathe vapours. Avoid contact with skin, eyes, and clothing.  
Take off immediately all contaminated clothing and wash it before reuse. Wear appropriate protective equipment.  
Do not allow containers to stand open. Handle and open container with care.  
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.  
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.  
When handling large quantities, supply emergency spray.

Precautions against fire and explosion:

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



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### 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.
- Keep away from sources of ignition and heat. Protect from direct sunlight.
- Storage temperature: 8 °C up to 12 °C.
- Store containers in upright position. Explosion protection required.
- Qualified materials: steel, polypropylene.
- Unsuitable materials: Copper, zinc.

Hints on joint storage: Do not store together with: acids, reducing agents, strong 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:

CAS No.	Designation	Type	Limit value
67-63-0	Isopropyl alcohol	Great Britain: WEL-STEL	1250 mg/m <sup>3</sup> ; 500 ppm
		Great Britain: WEL-TWA	999 mg/m <sup>3</sup> ; 400 ppm
		Ireland: 15 minutes	400 ppm
		Ireland: 8 hours	200 ppm

DNEL/DMEL:

Information about Isopropyl alcohol:  
DNEL long-term, consumer, oral, systemic: 26 mg/kg bw/d  
DNEL long-term, consumer, dermal, systemic: 319 mg/kg/d  
DNEL long-term, workers, dermal, systemic: 888 mg/kg/d  
DNEL long-term, consumer, inhalative, systemic: 89 mg/m<sup>3</sup>  
DNEL long-term, workers, inhalative, systemic: 500 mg/m<sup>3</sup>

PNEC:

Information about Isopropyl alcohol:  
PNEC water (freshwater): 140.9 mg/L  
PNEC water (marine water): 140.9 mg/L  
PNEC water (intermittent release): 140.9 mg/L  
PNEC sediment: 552 mg/kg  
PNEC soil: 28 mg/kg  
PNEC sewage treatment plant (stp): 2251 mg/L

### 8.2 Exposure controls

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



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### Personal protection equipment

#### Occupational exposure controls

- Respiratory protection:** When vapours form: Use appropriate 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.  
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
- Hand protection:** Protective gloves according to EN 374.  
Glove material: butyl caoutchouc (butyl rubber)-Layer thickness: 0.5 mm.  
Breakthrough time: >480 min.  
Unsuitable materials: natural rubber, nitrile rubber  
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.  
Change contaminated clothing. Contaminated work clothing should not be allowed out of the workplace.  
When using do not eat or drink. Wash hands before breaks and after work.  
Have eye wash bottle or eye rinse ready at work place.

## 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: dark brown
- Odour:** alcoholic
- Odour threshold:** No data available
- pH value:** 4
- Melting point/freezing point:** No data available
- Initial boiling point and boiling range:** > 100 °C
- Flash point/flash point range:** 28 °C
- Evaporation rate:** No data available
- Flammability:** Flammable liquid and vapour.
- Explosion limits:** LEL (Lower Explosion Limit): 2.00 Vol-% (Isopropyl alcohol)  
UEL (Upper Explosive Limit): 12.00 Vol-% (Isopropyl alcohol)
- Vapour pressure:** No data available
- Vapour density:** No data available
- Density:** 0.96 g/mL
- Water solubility:** completely miscible
- Partition coefficient: n-octanol/water:** No data available
- Auto-ignition temperature:** No data available
- Decomposition temperature:** No data available
- Viscosity, kinematic:** No data available



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Explosive properties:  
Oxidizing characteristics:

On contact with air, potentially explosive mixtures may develop.  
No data available

### 9.2 Other information

Ignition temperature: 425 °C (Isopropyl alcohol)

## 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 from direct sunlight.

### 10.5 Incompatible materials

Strong acids, strong bases, strong oxidizing agents, pyrophoric solids.

### 10.6 Hazardous decomposition products

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

Thermal decomposition: No data available



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### 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): ATE > 5000 mg/kg.  
Acute toxicity (dermal): Based on available data, the classification criteria are not met.  
ATEmix (calculated): ATE > 5000 mg/kg.  
Acute toxicity (inhalative): Lack of data.  
ATEmix (calculated): ATE > 20 mg/L([Dämpfe])  
Skin corrosion/irritation: Lack of data.  
Serious eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation.  
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): Lack of data.  
Aspiration hazard: Lack of data.

Other information: Information about Isopropyl alcohol:  
LD50 Rat, oral: 4570 mg/kg.  
LD50 Rabbit, dermal: 13400 mg/kg.  
LC50 Rat, inhalative: 30 mg/L/4h.

#### Symptoms

In case of inhalation:  
Information about Isopropyl alcohol: High concentrations of vapours irritate the eyes and mucous membranes.  
After contact with skin:  
Information about Isopropyl alcohol: Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Further details: No data available

#### 12.2 Persistence and degradability

Further details: No data available

#### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available





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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: 07 01 04\* = organic solvents, halogen-free  
\* = Evidence for disposal must be provided.

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

#### 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. Handle empty containers with care. Incineration may cause explosion.

## 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. (Isopropyl alcohol)

### 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

### 14.5 Environmental hazards

Marine pollutant: no



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### 14.6 Special precautions for user

#### Land transport (ADR/RID)

Warning board:	ADR/RID: Kemmler-number 30, UN number UN 1993
Hazard label:	3
Special provisions:	274 601
Limited quantities:	5 L
EQ:	E1
Contaminated packaging - Instructions:	P001 IBC03 LP01 R001
Special provisions for packing together:	MP19
Portable tanks - Instructions:	T4
Portable tanks - Special provisions:	TP1 TP29
Tank coding:	LGBF
Tunnel restriction code:	D/E

#### Sea transport (IMDG)

EmS:	F-E, S-E
Special provisions:	223, 274, 955
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:	T4
Tank instructions - Provisions:	TP1, TP29
Stowage and handling:	Category A.
Properties and observations:	-
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
Special provisions:	A3
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



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### National regulations - EC member states

Volatile organic compounds (VOC):

21 % by weight

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



Signal word:

**Warning**

Hazard statements: not applicable

Precautionary Statements:  
not applicable

### 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:

H225 = Highly flammable liquid and vapour.

H226 = Flammable liquid and vapour.

H319 = Causes serious eye irritation.

H336 = May cause drowsiness or dizziness.



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### 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  
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  
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 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 1.3: Department responsible for information

Date of first version: 11/3/2015

### 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.