

SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010



Protective Coating AR-PC 5090+5091 series

Material number AR-PC 5090+5091 series

Revision date: 4/24/2017
Version: 5

Language: en-US

Date of print: 4/24/2018
Page: 1 of 10

1. Product and company identification

Product identifier

Trade name: Protective Coating AR-PC 5090+5091 series

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

General use: Intermediate for electronic industry

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

Emergency phone number

Telephone: +49 (0)33 41-35 93-0

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid
Color: dark brown
Odor: alcoholic
Classification: Flammable Liquid - Category 3; Eye Irritation - Category 2A;
Specific Target Organ Toxicity (Single Exposure) - Category 3;

Hazard symbols:



Signal word:

Warning

Hazard statements:

Flammable liquid and vapor.
Causes serious eye irritation.
May cause drowsiness or dizziness.

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Precautionary statements: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing vapors.
Wash hands and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTER/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point.

Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

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.
see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Aqueous solution.

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 67-63-0	Isopropyl alcohol	< 30 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 25233-30-1	Polyaniline	< 5 %	not applicable
CAS 9005-64-5	Sorbitan monolaurate, ethoxylated	< 5 %	not applicable

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4. 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.
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.

Most important symptoms/effects, 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.

Information to physician

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.

5. Fire fighting measures

Flash point/flash point range:

82.4 °F

Auto-ignition temperature: No data available

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, dry chemical powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet.

Specific hazards arising from the chemical

Flammable liquid and vapor.

Air combined with vapors may form potentially explosive mixtures that are heavier than air. Vapor may travel great distances and cause fire and backflashes.

May form dangerous gases and vapours in case of fire. Carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

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Additional information: Heating will lead to pressure increase: Danger of bursting and explosion. Cool exposed containers with water spray.
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.

6. Accidental release measures

Personal precautions: Eliminate all ignition sources if safe to do so. If possible, eliminate leakage.
Avoid contact with the substance. Do not breathe vapors.
Wear appropriate protective equipment. Provide fresh air. Keep unprotected people away.
Cordon off downwind area at risk and warn inhabitants.

Environmental precautions: Do not allow to enter into ground-water, surface water or drains. Danger of explosion!
In case of release, notify competent authorities.

Methods for clean-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.

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe vapors.
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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Storage

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: 46.4 °F up to 53.6 °F.
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.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
67-63-0	Isopropyl alcohol	USA: ACGIH: STEL	984 mg/m ³ ; 400 ppm
		USA: ACGIH: TWA	492 mg/m ³ ; 200 ppm
		USA: NIOSH: STEL	1225 mg/m ³ ; 500 ppm
		USA: NIOSH: TWA	980 mg/m ³ ; 400 ppm
		USA: OSHA: TWA	980 mg/m ³ ; 400 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
67-63-0	Isopropyl alcohol	USA: ACGIH-BEI, urine	40 mg/L	Acetone in urine	end of shift at end of workweek

Engineering controls

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

See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Flame retardant, antistatic and chemical resistant protective clothing.
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
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.

Respiratory protection: When vapors 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. If the concentration is exceeded, self-contained breathing apparatus must be used.

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General hygiene considerations:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not breathe vapor or spray. 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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Physical state at 68 °F and 101.3 kPa: liquid Color: dark brown
Odor:	alcoholic
Odor threshold:	No data available
pH value:	4
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	> 212 °F
Flash point/flash point range:	82.4 °F
Evaporation rate:	No data available
Flammability:	Flammable liquid and vapor.
Explosion limits:	LEL (Lower Explosion Limit): 2.00 Vol-% (Isopropyl alcohol) UEL (Upper Explosive Limit): 12.00 Vol-% (Isopropyl alcohol)
Vapor pressure:	No data available
Vapor 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
Thermal decomposition:	No data available
Explosive properties:	On contact with air, potentially explosive mixtures may develop.
Ignition temperature:	797 °F (Isopropyl alcohol)

10. Stability and reactivity

Reactivity:	Flammable liquid and vapor. Vapors may form explosive mixtures with air.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	Heating will lead to pressure increase: Danger of bursting and explosion.
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect against direct sunlight.
Incompatible materials:	Strong acids, strong bases, strong oxidizing agents, pyrophoric solids.
Hazardous decomposition products:	No hazardous decomposition products when regulations for storage and handling are observed.
Thermal decomposition:	No data available

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11. Toxicological information

Toxicological tests

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 Irritation - Category 2A = 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): Specific Target Organ Toxicity (Single Exposure) - Category 3 = 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.
For carcinogenic effects
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed

Symptoms

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

12. Ecological information

Ecotoxicity

Further details: No data available

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

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Additional ecological information

Volatile organic compounds (VOC):

21 % by weight

General information: Do not allow to enter into ground-water, surface water or drains.

13. Disposal considerations

Product

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.

14. Transport information

USA: Department of Transportation (DOT)

Identification number: UN1993
Proper shipping name: UN 1993, UN 1993, flammable liquids, n.o.s. (Isopropyl alcohol)
Hazard class or Division: 3
Packing Group: III
Labels: 3
Symbols: G
Special provisions: B1, B52, IB3, T4, TP1, TP29
Packaging – Exceptions: 150
Packaging – Non-bulk: 203
Packaging – Bulk: 242
Quantity limitations – Passenger aircraft / rail: 60 L
Quantity limitations – Cargo only: 220 L
Vessel stowage – Location: A



Sea transport (IMDG)

UN number: UN 1993
Proper shipping name: UN 1993, FLAMMABLE LIQUID, N.O.S. (Isopropyl alcohol)
Class or division, Subsidiary risk: Class 3, Subrisk -
Packing Group: III
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: -
Marine pollutant: no
Segregation group: none

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Air transport (IATA)

UN/ID number: UN 1993
Proper shipping name: UN 1993, FLAMMABLE LIQUID, N.O.S. (Isopropyl alcohol)
Class or division, Subsidiary risk: Class 3
Packing Group: III
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

15. Regulatory information

National regulations - U.S. Federal Regulations

Isopropyl alcohol: TSCA Inventory: listed
TSCA HPVC: not listed
Carcinogen Status:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed
NIOSH Recommendations:
Occupational Health Guideline:
0359
Polyaniline: TSCA Inventory: not listed
Sorbitan monolaurate, ethoxylated: TSCA Inventory: listed; EPA flags XU
TSCA HPVC: not listed

National regulations - U.S. State Regulations

Product: Idaho Air Pollutant List:
Title 585: AAC: 3.6 - EL: 24 - OEL: - - Title 586: -
Isopropyl alcohol: Idaho Air Pollutant List:
Title 585: AAC: 49 -- EL: 65.3 -- WEL: 980 -Title 586: -
Massachusetts Haz. Substance codes: 2,4,5,6 F9
Minnesota Haz. Substance:
Codes: ANO -- Ratings: 7.84 -- Status: Title III. TRI.
New Jersey RTK Hazardous Substance:
DOT: 1219 - Sub No.: 1076 - TPQ: -
Pennsylvania Haz. Substance code: E
Washington Air Contaminant:
TWA: 400 ppm - 980 mg -- STEL: 500 ppm - 1225 mg
Idaho Air Pollutant List:
Title 585: AAC: 3.6 - EL: 24 - OEL: - - Title 586: -

National regulations - Great Britain

Hazchem-Code: •3Y

16. Other information

Text for labeling: Contains < 30 % Isopropyl alcohol, < 5 % Polyaniline, < 5 % Sorbitan monolaurate, ethoxylated. Safety data sheet available on request.

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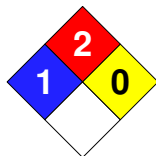
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Hazard rating systems:



NFPA Hazard Rating:
Health: 1 (Slight)
Fire: 2 (Moderate)
Reactivity: 0 (Minimal)
HMIS Version III Rating:
Health: 1 (Slight)
Flammability: 2 (Moderate)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	2
PHYSICAL HAZARD	0
	X

Reason of change: Changes in section 1: Emergency phone number
Date of first version: 3/11/2015

Department issuing data sheet

Contact person: see section 1: Dept. 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.

