



SAFETY DATA SHEET AJICURE PN-23

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

1.1. Product identifier

Product name AJICURE PN-23
Product number 15105
Synonyms; trade names AJICURE PN 23J

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

Identified uses Hardener.

1.3. Details of the supplier of the safety data sheet

Supplier

Univar
Aquarius House
6 Mid Point Business Park
Bradford
BD3 7AY
+44 1274 267300
sds@univar.com
+44 1274 267306

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 15105

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Eye Irrit. 2 - H319 Skin Sens. 1 - H317
Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) R43

2.2. Label elements

Pictogram



Signal word Warning

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Hazard statements	H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.
Precautionary statements	P261 Avoid breathing dust. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	4,4'-ISOPROPYLIDENEDIPHENOL

2.3. Other hazards

Dust may form explosive mixture with air. This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

A REACTION PRODUCT OF AN EPOXY, AN IMIDAZOLE AND A CARBOXYLIC ACID CAS number: 134091-76-2			60-100%
Classification Not Classified			
4,4'-ISOPROPYLIDENEDIPHENOL CAS number: 80-05-7 EC number: 201-245-8 REACH registration number: 01-2119457856-23-XXXX			1-5%
Classification Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361f STOT SE 3 - H335 Aquatic Chronic 2 - H411		Classification (67/548/EEC or 1999/45/EC) Xi; R37, R41. Repr. Cat. 3 R62. N; R51/53. R43	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Immediately rinse mouth and provide fresh air. Get medical attention if any discomfort continues. Do not induce vomiting.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Skin contact	May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically. No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Dust may form explosive mixture with air.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	Contain and collect extinguishing water.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust. Avoid contact with skin and eyes. Provide adequate ventilation. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage.
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6.2. Environmental precautions

Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Avoid generation and spreading of dust. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Usage precautions

Avoid spilling, skin and eye contact. Avoid handling which leads to dust formation. Avoid inhalation of dust. Provide adequate ventilation. Take precautionary measures against static discharges when there is a risk of dust explosion.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

4,4'-ISOPROPYLIDENEDIPHENOL

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³

WEL = Workplace Exposure Limit

4,4'-ISOPROPYLIDENEDIPHENOL (CAS: 80-05-7)

DNEL

Consumer - Inhalation; Short term local effects: 5 mg/m³
 Consumer - Inhalation; Long term local effects: 5 mg/m³
 Industry - Dermal; Long term systemic effects: 1.4 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 10 mg/m³
 Consumer - Dermal; Short term systemic effects: 0.7 mg/kg/day
 Consumer - Inhalation; Short term systemic effects: 5 mg/m³
 Consumer - Oral; Short term systemic effects: 0.05 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 0.7 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 0.25 mg/m³

PNEC

- Fresh water; 0.018 mg/l
 - Marine water; 0.016 mg/l
 - STP; 320 mg/l
 - Sediment; 2.2 mg/kg
 - Soil; 3.7 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust.

Eye/face protection

Wear approved safety goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. For prolonged or repeated skin contact use suitable protective gloves. Butyl rubber. EN 374

Hygiene measures

Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

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Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn. In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P2). EN 136/140/145/143/149

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Dusty powder.
Colour	Yellowish.
Odour	No data available.
Odour threshold	Data lacking.
pH	Data lacking.
Melting point	90 - 110°C
Initial boiling point and range	Data lacking.
Flash point	> 200°C CC (Closed cup).
Evaporation rate	Data lacking.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Data lacking.
Other flammability	No information available.
Vapour pressure	Data lacking.
Vapour density	Data lacking.
Relative density	1.21
Bulk density	No information available.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	Data lacking.
Decomposition Temperature	Data lacking.
Viscosity	Data lacking.
Explosive properties	Data lacking.
Explosive under the influence of a flame	No information available.
Oxidising properties	Not available.

9.2. Other information

Other information	Not available.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.

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Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Dust may form explosive mixture with air.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Nitrous gases (NOx).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	2,000.0
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Species	Rat
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Skin corrosion/irritation

Animal data	Data lacking.
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Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.
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Respiratory sensitisation

Respiratory sensitisation	No information available.
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Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction.
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Germ cell mutagenicity

Genotoxicity - in vitro	No information available.
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Carcinogenicity

Carcinogenicity	Data lacking.
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Reproductive toxicity

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Reproductive toxicity - fertility Data lacking.

Specific target organ toxicity - single exposure

STOT - single exposure Data lacking.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Data lacking.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact May cause an allergic skin reaction.

Eye contact Irritating to eyes.

4,4'-ISOPROPYLIDENEDIPHENOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,250.0

Species Rat

ATE oral (mg/kg) 3,250.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,000.0

Species Rabbit

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Irritating.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity Data lacking.

Reproductive toxicity

Reproductive toxicity - fertility Multi-generation study - NOAEL 50 mg/kg/day, Oral, Suspected of damaging fertility.

Specific target organ toxicity - single exposure

STOT - single exposure Data lacking.

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Specific target organ toxicity - repeated exposure

STOT - repeated exposure Dose level: 500 - 600 mg/kg, Oral,

Target organs Kidneys Liver

Aspiration hazard

Aspiration hazard Not applicable.

Inhalation Irritating to respiratory system.

Ingestion May cause stomach pain or vomiting.

Skin contact May cause sensitisation by skin contact.

Eye contact Causes serious eye damage.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

4,4'-ISOPROPYLIDENEDIPHENOL

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity Not considered toxic to fish.

4,4'-ISOPROPYLIDENEDIPHENOL

Toxicity Toxic to aquatic life.

Acute toxicity - fish LC₅₀, 96 hours: 4.6 mg/l, Pimephales promelas (Fat-head Minnow)
LC₅₀, 96 hour: 9.4 mg/l,
(Menidia menidia)
NOEC, 164 days: 0.16 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 7.75 mg/l, Freshwater invertebrates
EC₅₀, 48 hour: 10.2 mg/l, Daphnia magna
EC₅₀, 96 hour: 1.1 mg/l,
(Mysidopsis bahia)

Acute toxicity - aquatic plants ErC₅₀, 96 hour: 1.1 mg/l,
(Skeletonema costatum)

Acute toxicity - microorganisms EC₅₀, 96 hour: > 320 mg/l,

Chronic toxicity - fish early life stage NOEC, 444 days: 0.016 mg/l, Pimephales promelas (Fat-head Minnow)
NOEC, 116 days: 0.066 mg/l, Cyprinodon variegatus (Sheepshead minnow)

Chronic toxicity - aquatic invertebrates NOEC, 28 days: 0.17 mg/l,
(Mysidopsis bahia)
NOEC, 328 days: 0.025 mg/l,
(Marisa cornuarietis)

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12.2. Persistence and degradability

Persistence and degradability No data available.

4,4'-ISOPROPYLIDENEDIPHENOL

Persistence and degradability The substance is readily biodegradable.

Biodegradation - Degradation (%) 93.1%: 28 days
OECD 301F
- Degradation 87 - 95%: 28 days
OECD 302A

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

4,4'-ISOPROPYLIDENEDIPHENOL

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.
BCF: 5.1 - 13.3, Cyprinus carpio (Common carp)

Partition coefficient log Pow: 3.4 OECD 107

12.4. Mobility in soil

Mobility The product is insoluble in water.

4,4'-ISOPROPYLIDENEDIPHENOL

Mobility The product is insoluble in water.

Adsorption/desorption coefficient - Log Koc: 636 - 931 @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

4,4'-ISOPROPYLIDENEDIPHENOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

4,4'-ISOPROPYLIDENEDIPHENOL

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Do not puncture or incinerate, even when empty.

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Disposal methods Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

**Annex II of MARPOL 73/78
and the IBC Code**

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.

Guidance

This product contains a substance that is a SVHC.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

31/03/2017

Revision

05

Supersedes date

12/02/2015

SDS number

15105

AJICURE PN-23

Version number	2.000
SDS status	Approved.
Signature	Jitendra Panchal
Risk phrases in full	R37 Irritating to respiratory system. R41 Risk of serious damage to eyes. R43 May cause sensitisation by skin contact. R52 Harmful to aquatic organisms. R62 Possible risk of impaired fertility.
Hazard statements in full	H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H361f Suspected of damaging fertility. H411 Toxic to aquatic life with long lasting effects.