

SAFETY DATA SHEET

Aka-Resin Phenolic-2, Black

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

1.1. Product identifier

Trade name

Aka-Resin Phenolic-2, Black

Product no.

21502122-21502124

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

Relevant identified uses of the substance or mixture

Embedding of metallographic samples

▼ Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Akasel A/S

Svogerslev Hovedgade 48

4000 Roskilde

Denmark

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www.akasel.com

E-mail

safety@akasel.com

Revision

01/01/2023

SDS Version

2.0

Date of previous version

06/07/2022 (1.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation.

Skin Sens. 1; H317, May cause an allergic skin reaction.

Eye Irrit. 2; H319, Causes serious eye irritation.

Muta. 2; H341, Suspected of causing genetic defects.

2.2. Label elements

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)

Causes skin irritation. (H315)

May cause an allergic skin reaction. (H317)

Causes serious eye irritation. (H319)

Suspected of causing genetic defects. (H341)

Safety statement(s)

General

-

Prevention

Obtain special instructions before use. (P201)

Wear eye protection/protective gloves/protective clothing. (P280)

Avoid breathing dust. (P261)

Response

IF exposed or concerned: Get medical advice/attention. (P308+P313)

If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)

Storage

-

▼ Disposal

Dispose of contents/container in accordance with local regulation. (P501)

Hazardous substances

methenamine;hexamethylenetetramine

Phenol

▼ Additional labelling

Not applicable.

2.3. Other hazards

▼ Additional warnings

May form combustible dust concentrations in air.

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. ▼ Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
methenamine;hexamethylene tetramine	CAS No.: 100-97-0 EC No.: 202-905-8 UK-REACH: Index No.: 612-101-00-2	10-15%	Flam. Sol. 2, H228 Skin Sens. 1B, H317	
Phenol	CAS No.: 108-95-2 EC No.: 203-632-7 UK-REACH: Index No.: 604-001-00-2	1-3%	Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 (SCL: 3.00 %) Skin Irrit. 2, H315 (SCL: 1.00 %) Eye Irrit. 2, H319 (SCL: 1.00 %) Acute Tox. 3, H331 Muta. 2, H341 STOT RE 2, H373	[1]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

▼ Other information

[1] European occupational exposure limit.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

▼ Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

▼ Burns

Not applicable.

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

Headache, Methaemoglobinaemia (Phenol)

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. ▼ Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Nitrogen oxides (NO_x)

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. ▼ Methods and material for containment and cleaning up

Collect spills carefully. Moist the material with water in order to prevent the formation and propagation of dust.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. ▼ Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Powder trickling out onto the floor or onto other containers must be prevented.

Avoid the suspension of dust in the air.

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

Use non-sparking tools.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

Room temperature 18 to 23°C

Dry, cool and well ventilated

Incompatible materials

Strong oxidizing agents

Strong acids

7.3. ▼ Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Phenol

Long term exposure limit (8 hours) (ppm): 2

Long term exposure limit (8 hours) (mg/m³): 7,8

Short term exposure limit (15 minutes) (ppm): 4

Short term exposure limit (15 minutes) (mg/m³): 16

Annotations:

Sk = Can be absorbed through the skin and lead to systemic toxicity.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

▼ DNEL

No data available.

▼ PNEC

No data available.

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

When transferring the materials, dust clouds should be kept at an absolute minimum. Handling should be slow and deliberate. The materials should be transferred from one container to another using a non-sparking, conductive metal scoop.

When mixing the material with other dry ingredients, frictional heat should be avoided. The best type of mixer for a dry mixing operation is one that contains no moving parts, but rather affects a tumbling action, such as a conical blender. Introduction of an inert atmosphere in the blender is highly recommended since dust clouds are generated. All equipment must be well grounded.

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Do not recirculate outlet air that contain the substances.

Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

8.3. Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Work situation	Type	Class	Colour	Standards
In case of insufficient ventilation, a protective mask should be worn				



Skin protection

Recommended	Type/Category	Standards
No special when used as intended.	-	-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Butyl	0,3	> 480	EN374-2, EN374-3, EN388



Eye protection

Type	Standards
No special when used as intended.	-

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Granulate

Colour

Black

Odour / Odour threshold

None

▼ pH

Testing not relevant or not possible due to the nature of the product.

▼ Density (g/cm³)

Testing not relevant or not possible due to the nature of the product.

Kinematic viscosity

Does not apply to solids.

▼ Particle characteristics

Testing not relevant or not possible due to the nature of the product.

Phase changes

Melting point/Freezing point (°C)

85-95

Softening point/range (waxes and pastes) (°C)

Does not apply to solids.

Boiling point (°C)

Not applicable - product is a solid

▼ Vapour pressure

Testing not relevant or not possible due to the nature of the product.

Relative vapour density

Does not apply to solids.

▼ **Decomposition temperature (°C)**

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Does not apply to solids.

▼ **Auto-Ignition (°C)**

Testing not relevant or not possible due to the nature of the product.

▼ **Flammability (°C)**

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

Does not apply to solids.

Solubility

▼ **Solubility in water**

Testing not relevant or not possible due to the nature of the product.

▼ **n-octanol/water coefficient**

Testing not relevant or not possible due to the nature of the product.

▼ **Solubility in fat (g/L)**

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

Formation of explosible dust/air mixtures

Yes

▼ **Other physical and chemical parameters**

No data available.

SECTION 10: Stability and reactivity

10.1. ▼ Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. ▼ Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid the suspension of dust in the air.

10.5. Incompatible materials

Strong oxidizing agents

Strong acids

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/substance	Phenol
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	317 mg/kgbw
Other information	

Product/substance	Phenol
Test method	
Species	Rabbit
Route of exposure	Oral
Test	LD50
Result	850 mg/kgbw

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Other information

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs.
Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

▼ Endocrine disrupting properties

None known.

Other information

Phenol has been classified by IARC as a group 3 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	methenamine;hexamethylenetetramine
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	49,8 g/L
Other information	

Product/substance	methenamine;hexamethylenetetramine
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	36 g/L
Other information	

Product/substance	Phenol
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	LC50
Result	3000 µg/L
Other information	

Product/substance	Phenol
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According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Test method
Species Fish
Compartment
Duration 96 hours
Test LC50
Result 6082 µg/L
Other information

12.2. ▼ Persistence and degradability

No data available.

12.3. ▼ Bioaccumulative potential

Product/substance methenamine;hexamethylenetetramine
Test method
Potential bioaccumulation No data available.
LogPow -2,18
BCF No data available.
Other information

Product/substance Phenol
Test method
Potential bioaccumulation No data available.
LogPow 1,4600
BCF No data available.
Other information

12.4. Mobility in soil

Phenol
LogKoc = 1.234574, High mobility potential.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. ▼ Endocrine disrupting properties

None known.

12.7. ▼ Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is not covered by regulations on dangerous waste.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

▼ EWC code

Not applicable.

▼ Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. ▼ Special precautions for user

Not applicable.

14.7. ▼ Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

▼ Demands for specific education

No specific requirements.

▼ SEVESO - Categories / dangerous substances

Not applicable.

Regulation on explosives precursors

methenamine;hexamethylenetetramine (Annex II)

▼ Additional information

Not applicable.

▼ Sources

The Management of Health and Safety at Work Regulations 1999.

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Council Regulation (EC) No 2019/1148 on explosives precursors as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H228, Flammable solid.

H301, Toxic if swallowed.

H311, Toxic in contact with skin.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H319, Causes serious eye irritation.

H331, Toxic if inhaled.

H341, Suspected of causing genetic defects.

H373, May cause damage to organs through prolonged or repeated exposure.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

▼ [The safety data sheet is validated by](#)
iro@akasel.com

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en