

# SAFETY DATA SHEET

# Aka-Cure, Quick

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

#### 1.1. Product identifier

Trade name

Aka-Cure, Quick

Product no.

25101223 (8590, 8591)

Other means of identification

EC No.: 217-168-8 CAS No.: 1761-71-3

Unique formula identifier (UFI)

2APH-151W-X9PC-0CQX

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

Relevant identified uses of the substance or mixture

Quick curing agent for liquid epoxy

Uses advised against

No special

# 1.3. Details of the supplier of the safety data sheet

## Company and address

## Akasel A/S

Svogerslev Hovedgade 48

4000 Roskilde

Denmark

+45 57 84 05 01

www.akasel.com

E-mail

safety@akasel.com

SDS date

22-09-2021

SDS Version

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

Acute Tox. 4; H302, Harmful if swallowed.

Skin Corr. 1A; H314, Causes severe skin burns and eye damage.

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

Eye Dam. 1; H318, Causes serious eye damage.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

Aguatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

#### 2.2. Label elements



## Hazard pictogram(s)









## Signal word

#### Danger

## Hazard statement(s)

Harmful if swallowed. (H302)

Causes severe skin burns and eye damage. (H314)

May cause an allergic skin reaction. (H317)

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

Toxic to aquatic life with long lasting effects. (H411)

## Safety statement(s)

General

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# Prevention

Do not breathe vapour / mist. (P260)

Wash hands and exposed skin thoroughly after handling. (P264)

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

# Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. (P303+P361+P353)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)

#### Storage

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## Disposal

Dispose of contents/container to an approved waste disposal plant. (P501)

# Hazardous substances

4,4,-methylenedicyclohexanamine

#### 2.3. Other hazards

# Additional labelling

Not applicable

# Additional warnings

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

# SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Product/substance	Identifiers	% w/w	Classification	Note
4,4,- methylenedicyclohexanamine	CAS No.: 1761-71-3 EC No.: 217-168-8 REACH: Index No.:	95-100%	Acute Tox. 4, H302 Skin Sens. 1B, H317 Eye Dam. 1, H318 Skin Corr. 1A, H314 STOT RE 2, H373 Aquatic Chronic 2, H411	

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

#### Other information

No special

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#### 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 with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

#### Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

#### **Burns**

Not applicable

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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.

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.

## 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<sub>x</sub>)

Carbon oxides (CO / CO2).



Combustion of product may release carbon oxides or other toxic gasses/vapour e.g. ammonia and nitric gases (NOx)

# 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

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

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

## 6.4. Reference to other sections

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

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

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

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.

## Recommended storage material

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

#### Storage temperature

Room temperature 18 to 23°C

## Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

Keep free of moisture and carbon dioxide. Keep in original container at temperatures below 25°C. Crystallizes below 15°C, warm to max 60°C and mix thoroughly.

## 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

No substances are listed in the national list of substances with an occupational exposure limit.

# **DNEL**

Product/substance 4,4,-methylenedicyclohexanamine

DNEL 1 mg/m3
Route of exposure Inhalation



	Duration	Long term – Systemic effects - Workers
	Product/substance DNEL	4,4,-methylenedicyclohexanamine 0,1 mg/kg/day
	Route of exposure	Dermal
	Duration	Long term – Systemic effects - Workers
	Product/substance	4,4,-methylenedicyclohexanamine
	DNEL Route of exposure	0,21 mg/m3 Inhalation
	Duration	Long term – Systemic effects - General population
	Product/substance	4,4,-methylenedicyclohexanamine
	DNEL	0,06 mg/kg/day
	Route of exposure Duration	Oral
	Duration	Long term – Systemic effects - General population
PNEC		
	Product/substance	4,4,-methylenedicyclohexanamine
	PNEC Route of exposure	0,008 mg/l Marine water
	Duration of Exposure	Walling Water
	Product/substance	4,4,-methylenedicyclohexanamine
	PNEC Route of exposure	0,08 mg/l Freshwater
	Duration of Exposure	Treshwater
	Product/substance	4,4,-methylenedicyclohexanamine
	PNEC	137 mg/kg Freshwater sediment
	Route of exposure Duration of Exposure	rreshwater seument
	Product/substance	4,4,-methylenedicyclohexanamine
	PNEC Route of exposure	3,2 mg/l Sewage treatment plant
	Duration of Exposure	Serrage deathers plant
	Product/substance	4,4,-methylenedicyclohexanamine
	PNEC	13,7 mg/kg
	Route of exposure Duration of Exposure	Marine water sediment
	Product/substance	4,4,-methylenedicyclohexanamine
	PNEC Route of exposure	0,08 mg/l Intermittent release
	Duration of Exposure	THE THIRLE IT TELEBOOK
	Product/substance	4,4,-methylenedicyclohexanamine
	PNEC	27,2 mg/kg Soil
	Route of exposure	3011

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## **Duration of Exposure**

# 8.2. Exposure controls

Control is unnecessary if the product is used as intended.

## General recommendations

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**

Occupational exposure limits have not been defined for the substances in this product.

## Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

## Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

# Measures to avoid environmental exposure

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

## Individual protection measures, such as personal protective equipment

## Generally

Use only CE marked protective equipment.

# **Respiratory Equipment**

Work situation	Type	Class	Colour	Standards	
In case of insufficient ventilation, a protective mask should be worn	K	Class 2 (medium capacity)	Green	EN14387	

# Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	

# Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0.38	> 480	EN374-2, EN374-3, EN388	

# Eye protection

Work situation	Туре	Standards	
At risk of splashing in the eyes	Wear safety glasses with side shields.	EN166	

# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

#### Form

Liquid



```
Colour
      Transparent
   Odour
      Ammonia odor
   Odour threshold (ppm)
      Testing not relevant or not possible due to nature of the product.
   рН
   Density (g/cm³)
      0.964 (20.00 °C)
   Viscosity
      29.60 mPa.s (40.00 °C)
Phase changes
   Melting point (°C)
      -17,7 - 65,4 °C
   Boiling point (°C)
      320.00 °C
   Vapour pressure
      Testing not relevant or not possible due to nature of the product.
   Vapour density
      Testing not relevant or not possible due to nature of the product.
   Decomposition temperature (°C)
      Testing not relevant or not possible due to nature of the product.
   Evaporation rate (n-butylacetate = 100)
Data on fire and explosion hazards
   Flash point (°C)
      >100 °C
   Ignition (°C)
      Testing not relevant or not possible due to nature of the product.
   Auto flammability (°C)
      Testing not relevant or not possible due to nature of the product.
   Explosion limits (% v/v)
      1.60 - 3.60 v/v%
   Explosive properties
      Testing not relevant or not possible due to nature of the product.
   Oxidizing properties
      Testing not relevant or not possible due to nature of the product.
Solubility
   Solubility in water
      Insoluble
   n-octanol/water coefficient
      Testing not relevant or not possible due to nature of the product.
   Solubility in fat (g/L)
      Testing not relevant or not possible due to nature of the product.
9.2. Other information
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# SECTION 10: Stability and reactivity

# 10.1. Reactivity

This product can produce strong reactions with: Peroxides.

This product can produce reactions with: Acids. Oxidising agents. Sodium hypochlorite.

## 10.2. Chemical stability

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

Product may partially freeze with extended exposure to cold temperatures, resulting in crystallisation, haziness, or seperation. If this occurs, product should be warmed to 38°C-60°C for an hour and stirred until clear.



## 10.3. Possibility of hazardous reactions

No special

#### 10.4. Conditions to avoid

No special

## 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

#### 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 toxicological effects

# Acute toxicity

Product/substance

4,4,-methylenedicyclohexanamine

Test method

Species Rat
Route of exposure Oral
Test LD50
Result 625 mg/kg

Other information

Product/substance

4,4,-methylenedicyclohexanamine

Test method

Species Rabbit
Route of exposure Dermal
Test LD50
Result 2110 mg/kg

Other information

Harmful if swallowed.

# Skin corrosion/irritation

Causes severe skin burns and eye damage.

## Serious eye damage/irritation

Causes severe skin burns and eye damage.

Causes serious eye damage.

# Respiratory sensitisation

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

#### Skin sensitisation

May cause an allergic skin reaction.

# Germ cell mutagenicity

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

# 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

May cause damage to organs through prolonged or repeated exposure.

# Aspiration hazard

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

## Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as



coughing. Dermal contact and contact with the eye cause irreversible effects.

# Other information

No special

# SECTION 12: Ecological information

## 12.1. Toxicity

Product/substance

4,4,-methylenedicyclohexanamine

Test method

Species Fish

Compartment

Duration 96 hours
Test LC50
Result >100 mg/L

Other information

Product/substance

4,4,-methylenedicyclohexanamine

Test method

Species

Fish

Compartment

Duration 96 hours
Test LC0
Result 46 mg/L

Other information

Product/substance

4,4,-methylenedicyclohexanamine

Test method

Species

Daphnia Magna

Compartment

Duration 48 hours
Test EC50
Result 6,84 mg/L

Other information

Product/substance

4,4,-methylenedicyclohexanamine

Test method Species

cies Daphnia Magna

Compartment

Duration 21 days
Test NOEC
Result 4 mg/L

Other information

Product/substance

4,4,-methylenedicyclohexanamine

Test method

Species Algae

Compartment

Duration 72 hours Test EC50

Result 140 - 200 mg/L

Other information

# 12.2. Persistence and degradability

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Product/substance

4,4,-methylenedicyclohexanamine

Biodegradable

Test method Result

# 12.3. Bioaccumulative potential

Product/substance

4,4,-methylenedicyclohexanamine

Test method

Potential No

bioaccumulation

LogPow 2,03

BCF No data available

Other information

## 12.4. Mobility in soil

No data available

## 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. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

HP 6 - Acute toxicity

HP 8 - Corrosive

HP 13 - Sensitising

HP 14 - Ecotoxic

Avoid discharge to lakes, streams, sewers, etc.

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

# 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 - 14.4

This product is within scope of the regulations of transport of dangerous goods.

## ADR/RID

UN- or ID number	UN proper shipping name	Labels	Packing group	Tunnel restriction code
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE,	8	II	2 (E)

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UN- or ID number	UN proper shipping name	Labels	Packing group	Tunnel restriction code
	N.O.S.			

## **IMDG**

UN- or ID number	UN proper shipping name	Labels	Packing group	EmS
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	II	F-A, S-B

## "MARINE POLLUTANT"

Yes

#### **IATA**

UN- or ID number	UN proper shipping name	Labels	Packing group
2735	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S.	8	П

## 14.5. Environmental hazards

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

## 14.6. Special precautions for user

Not applicable

# 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 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

E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper-tier): 500 tonnes

#### 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.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

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 (CLP).

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).

# 15.2. Chemical safety assessment

No



#### SECTION 16: Other information

## Full text of H-phrases as mentioned in section 3

H302, Harmful if swallowed.

H314, Causes severe skin burns and eye damage.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

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

H411, Toxic to aquatic life with long lasting effects.

## 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** 

UVCB = Complex hydrocarbon substance

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)

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

# 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

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