

# SAFETY DATA SHEET

# Aka-Resin Liquid Epoxy

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

```
1.1. Product identifier
   Trade name
      Aka-Resin Liquid Epoxy
   Product no.
      25101115-25101117 (8510-8520)
   ▼ Unique formula identifier (UFI)
      8QUF-21GT-Q849-0MS5
1.2. Relevant identified uses of the substance or mixture and uses advised against
   Relevant identified uses of the substance or mixture
      Liquid epoxy resin for embedding of metallographic samples
   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
      2.0
   Date of previous version
      2020-04-16 (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
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# 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.

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

# 2.2. Label elements

Hazard pictogram(s)



	Signal word
	warning
	▼ Hazard statement(s)
	Causes skin initiation. (H315) May cause an allergic skin reaction. (H217)
	$Cause an anergic skin reaction. (\square 317)$
	Toxic to aquatic life with long lasting effects (H/11)
	Safety statement(s)
	General
	▼ Prevention
	Avoid breathing dust. (P261)
	Contaminated work clothing should not be allowed out of the workplace. (P272)
	Wear eye protection / protective gloves / protective clothing. (P280)
	▼ Response
	If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)
	Take off contaminated clothing and wash it before reuse. (P362+P364)
	Storage
	-
	▼ Disposal
	Dispose of contents/container to an approved waste disposal plant. (P501)
	Hazardous substances
	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq$ 700)
	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
	2.3. Other nazards
	<ul> <li>Additional labelling</li> <li>EUH20E Contains approximate May produce an allergic reaction</li> </ul>
	Additional warnings
	Contains enoxy constituents. May produce an allergic reaction
	This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT
	and/or vPvB.
į	
	SECTION 3: Composition/information on ingredients
	▼3.2 Mixtures

# 

Product/substance	Identifiers	% w/w	Classification	Note
reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	CAS No.: 25068-38-6 EC No.: 500-033-5 REACH: Index No.: 603-074-00-8	60-100%	Skin Irrit. 2, H315 (SCL: 5.00 %) Skin Sens. 1, H317 Eye Irrit. 2, H319 (SCL: 5.00 %) Aquatic Chronic 2, H411	
oxirane, mono[(C12-14- alkyloxy)methyl] derivs.	CAS No.: 68609-97-2 EC No.: 271-846-8 REACH: 01-2119485289-22- xxxx Index No.: 603-103-00-4	10-30%	Skin Irrit. 2, H315 Skin Sens. 1, H317	



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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

# 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

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. 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 victim 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

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 eye irritation persists: Get 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:

Carbon oxides (CO / CO2).



Containers may explode when heated due to excessive pressure build-up.

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

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.

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

5 - 40°C

▼ Incompatible materials

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

Store in a cool, dry place and should not come into contact with heat sources.

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	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
DNEL	8,33 mg/kg/day
Route of exposure	Dermal
Duration	Long term – Systemic effects - Workers
Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)



	DNEL Route of exposure	12,25 mg/m3 Inhalation
	Duration	Short term – Systemic effects - Workers
	Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
	DNEL	12,25 mg/m3
	Route of exposure	Inhalation
	Duration	Long term – Systemic effects - Workers
	Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
	DNEL	3,571 mg/kg/day
	Route of exposure	Dermal
	Duration	Short term – Systemic effects - General population
	Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
	DNEL	3,571 mg/kg/day
	Route of exposure	Dermal
	Duration	Long term – Systemic effects - General population
	Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
	DNEL	0,75 mg/kg/day
	Route of exposure	Oral
	Duration	Short term – Systemic effects - General population
	Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
	DNEL	0,75 mg/kg/day
	Route of exposure	Oral
	Duration	Long term – Systemic effects - General population
	Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
	DNEL	8,33 mg/kg/day
	Route of exposure	Dermal
	Duration	Short term – Systemic effects - Workers
▼ PN	EC	
	Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
	PNEC	0,196 mg/kg
	Route of exposure	Soil
	Duration of Exposure	
	Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
	PNEC	0,0996 mg/l
	Route of exposure	Marine water sediment
	Duration of Exposure	



Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight
PNEC	0,996 mg/l
Route of exposure	Freshwater sediment
Duration of Exposure	
Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight 700)
PNEC	0,018 mg/l
Route of exposure Duration of Exposure	Intermittent release
Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight 700)
PNEC	0,0006 mg/l
Route of exposure	Marine water
Duration of Exposure	
Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight 700)
PNEC	0,006 mg/l
Route of exposure	Freshwater
Duration of Exposure	
Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight 700)
PNEC	10 mg/l
Route of exposure	Sewage treatment plant
Duration of Exposure	
Exposure controls	
Control is unnecessar	rv if the product is used as intended
General recommendat	tions
Smoking, drinking an	id consumption of food is not allowed in the work area.
xnosure 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

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.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

▼ Respiratory Equipment

Work situation	Туре	Class	Colour	Standards	
In case of insufficient ventilation	Combination filter A2P2	Class 2	Brown/White	EN14387	6



# Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-	R

#### ▼ Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388	

#### ▼ Eye protection

Туре	Standards
Wear safety glasse	s with EN166

# SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties
   Form
      Liquid
   Colour
      Yellow
   Odour
      Mild
   Odour threshold (ppm)
      Testing not relevant or not possible due to nature of the product.
   pН
      Testing not relevant or not possible due to nature of the product.
   Density (g/cm<sup>3</sup>)
      1,11-1,14
   Viscosity
      600-800 cP
Phase changes
   Melting point (°C)
      Testing not relevant or not possible due to nature of the product.
   Boiling point (°C)
      > 148 °C
   Vapour pressure
      0.06 mmHg (21.00 °C)
   Vapour density
      Testing not relevant or not possible due to nature of the product.
   ▼ Decomposition temperature (°C)
      > 350 °C
   Evaporation rate (n-butylacetate = 100)
Data on fire and explosion hazards
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Flash point (°C)
176,7 - 190,6 °C
Ignition (°C) Testing not relevant or not possible due to pature of the product
Auto flammability (%)
Tasting not relevant or not possible due to pature of the product
Evaluation limits (% v/v)
$1.60 - 3.60 \times 10^{-3}$
Evolosive properties
Testing not relevant or not possible due to pature of the product
Ovidizing properties
Testing not relevant or not possible due to pature 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
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
No special
10.4. Conditions to avoid
Containers may explode when heated due to excessive pressure build-up.
10.5. Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
10.6. Hazardous decomposition products
i në 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	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	23000 mg/kg
Other information	
Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Test method	
Species	Rat
Route of exposure	Oral



	Test	LD50		
	Result	15000 mg/kg		
	Other information			
	Product/substance	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.		
	Test method			
	Species	Rat		
	Route of exposure	Oral		
	Test	LD50		
	Result	17100 mg/kg		
	Other information			
Ski	in corrosion/irritation			
	Causes skin irritation.			
Se	rious eye damage/irrita	ation		
	Causes serious eye irri	itation.		
V	Respiratory sensitisatio	n		
	Based on available dat	a, the classification criteria are not met.		
▼ 9	Skin sensitisation			
	May cause an allergic	skin reaction.		
Ge	rm cell mutagenicity			
	Based on available dat	a, the classification criteria are not met.		
Ca	rcinogenicity			
	Based on available dat	a, the classification criteria are not met.		
Re	productive toxicity			
	Based on available dat	a, the classification criteria are not met.		
ST	OT-single exposure			
	Based on available data, the classification criteria are not met.			
ST	OT-repeated exposure			
	Based on available dat	a, the classification criteria are not met.		
As	piration hazard			
	Based on available dat	a, the classification criteria are not met.		
Lo	ng term effects			
	Irritation effects: This	product contains substances, which may cause irritation upon exposure to skin, eyes or		
	lungs. Exposure may r	esult in an increased absorption potential of other hazardous substances at the area of		
	exposure.			
Ot	her information			
	No special			
SECTI	ON 12: Ecological infor	mation		
▼12.1	I. Toxicity			
	Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <		
		700)		
	Test method			
	Species	Fish		
	Compartment			
	Duration	96 hours		
	Test	LC50		
	Result	2 mg/L		
	Other information	-		
	Product/substance	reaction product: <code>bisphenol-A-(epichlorhydrin)</code> epoxy resin (number average molecular weight $\leq$		



	700)
Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	EC30
Result	11 mg/L
Other information	
Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Test method	,
Species	Crustacean
Compartment	
Duration	21 days
Test	LT50
Result	0.3 mg/L
Other information	
Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	1,8 mg/L
Other information	
Product/substance	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	
Result	1800 mg/L
Other information	
Product/substance Test method	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
Species	Activated sludge
Compartment	
Duration	3 hours
Test	EC50
Result	100 mg/L
Other information	
Product/substance Test method	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
Species	Algae
Compartment	
Duration	72 hours



Test Result Other information	EC50 843 mg/L
Product/substance	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
rest method	
Species	Algae
Compartment	
Duration	72 hours
Test	NOEC
Result	500 mg/L
Other information	

# ▼ 12.2. Persistence and degradability

Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Biodegradable	No
Test method	OECD 301 B
Result	12% (28 dg)
Product/substance	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
Biodegradable	Yes
Test method	OECD 301 F
Result	87 % (28 d)

#### ▼ 12.3. Bioaccumulative potential

Product/substance	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)			
Test method				
Potential	Yes			
bioaccumulation				
LogPow	3,2420			
BCF	100			
Other information				
Product/substance	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.			
Test method				
Potential	Yes			

bioaccumulation	
LogPow	3,7700
BCF	160
Other information	

#### 12.4. Mobility in soil

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

LogKoc = 3.063863, Moderate 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. 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.



This product contains substances with the potential of bioaccumulation resulting in the risk of accumulation in the food chain. Bioaccumulative substances are concentrated in adipose tissue and are not easily secreted.

SECTION 13: Disposal considerations

# ▼ 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste. HP 4 - Irritant (skin irritation and eye damage) 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.

These substances when carried in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR/IMDG/IATA provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (ADR, IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA)

## ▼ ADR/RID

UN- or ID number	UN proper shipping name	Labels	Packing group	Tunnel restriction code
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	III	3 (-)

# ▼IMDG

UN- or ID number	UN proper shipping name	Labels	Packing group	EmS
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	III	F-A, S-F

#### "MARINE POLLUTANT"

- Yes
- ▼ IATA

UN- or ID number	UN proper shipping name	Labels	Packing group
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	III

# 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

This product is covered by the ADR Special Provision 375, IATA Special provision A197 and IMDG exception 2.10.2.7: Marine pollutants packaged in single or combination packagings containing a net quantity per single or



inner packaging of max. 5 L or having a net mass per single or inner packaging of max. 5 kg for solids are not subject to any other provisions of ADR / IMDG /IATA provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (ADR and IMDG) and/or 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8 (IATA).

▼ 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

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

# Demands for specific education

Use of this product requires dedicated training in work with polyurethane and epoxy products.

## ▼ 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

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

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H319, Causes serious eye irritation.

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