Part A LiqRep Metal - Hardener

Safety Data Sheet

according to Regulation (EU) 2020/878

Date of issue: 05.07.2024 Revision date: 20.08.2026 Version/Replaced version: 3.0/2.0

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

1.1. Product identifier

Product form : Mixture

Product name : Part A LiqRep Metal – Hardener

Product code : B53.810

UFI : WNYE-U00M-X00A-771H

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

1.2.1. Relevant identified uses

Intended for general public

Use of the substance/mixture : Two-component glue: Hardener

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
ElringKlinger AG
Max-Eyth-Straße 2
72581 Dettingen/Erms - Germany
T +49 (0)7123 724 799
det.iam.sdb@elringklinger.com

Supplier

Safety Data Sheet: DLAC Dienstleistungsagentur Chemie GmbH, E-mail: sds@dlac-gmbh.de

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
Germany	Giftinformationszentrum (GIZ-Nord) Universitätsmedizin Göttingen - Georg-August-Universität	Robert-Koch Straße 40 37075 Göttingen	+49 551 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Skin corrosion/irritation, Category 1C H314

Serious eye damage/eye irritation, Category 1 H318

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Hazardous ingredients : 2,4,6-tris(dimethylaminomethyl)phenol, Bis[(dimethylamino)methyl]phenol

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P280 - Wear protective gloves/protective clothing/eye protection.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with 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.
P310 - Immediately call a POISON CENTER or doctor/physician.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

The mixture does not contain substance(s) classified as PBT or vPvB in concentrations above 0.1 %.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 %.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No 1272/2008 [CLP]
2,4,6-tris(dimethylaminomethyl)phenol	(CAS No) 90-72-2 (EC No) 202-013-9 (Index No) 603-069-00-0 (REACH No) 01-2119560597-27-xxxx	< 20	Skin Corr. 1C, H314 Eye Dam. 1, H318
Bis[(dimethylamino)methyl]phenol	(CAS No) 71074-89-0 (EC No) 275-162-0	< 5	Skin Corr. 1C, H314

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell. If possible, show him this sheet. Failing this, show him the packaging or label. Never give anything by mouth to an unconscious person. Place the affected person in the recovery position.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Immediately call a POISON CENTER/doctor.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Rinse mouth. Drink water as a precaution. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

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

Symptoms/effects after skin contact : Causes severe skin burns and eye damage.

Symptoms/effects after eye contact : Causes serious eye damage.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing agents that suit the environment. Carbon dioxide. Extinguishing powder. Water spray. For a significant fire: Alcohol resistant foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Toxic gases and vapors. Nitrogen oxides. Ammonia.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.

Protection during firefighting : Use a self-contained breathing apparatus and also a protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Provide adequate ventilation. Do not breathe vapours/spray. Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : If spilled, may cause the floor to be slippery. Wipe up with absorbent material (for example cloth). Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Keep in suitable, closed containers for disposal. Dispose of in accordance with relevant local regulations.

6.4. Reference to other sections

Exposure controls and personal protection, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid breathing vapours, spray. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. When using do not eat, drink or smoke. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in original container. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Protect from heat and direct sunlight.

Storage temperature : 10 – 20 °C

Prohibitions on mixed storage : Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2,4,6-tris-(Dimethylaminomethyl)phenol (90-72-2)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	0.6 mg/kg bodyweight/day
Acute - systemic effects, inhalation	2.1 mg/m³
Long-term - systemic effects, dermal	0.15 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.53 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	0.075 mg/kg bodyweight/day
Acute - systemic effects, inhalation	0.13 mg/m³
Long-term - systemic effects, oral	0.075 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.13 mg/m³
Long-term - systemic effects, dermal	0.075 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.046 mg/l
PNEC aqua (marine water)	0.0046 mg/l
PNEC aqua (intermittent, freshwater)	0.46 mg/l
PNEC aqua (intermittent, marine water)	0.046 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.262 mg/kg dwt
PNEC sediment (marine water)	0.026 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.025 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0.2 mg/l

8.2. Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation to minimize vapour concentrations.

Hand protection : Wear suitable gloves (EN 374). Nitrile rubber. Fluoroelastomer (FKM). PVC. ≥ 0.5 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection : Chemical goggles or safety glasses (EN ISO 16321).

Skin and body protection : Wear suitable protective clothing.

Respiratory protection	:	Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Respiratory protection with filter type A2/P3 (EN 14387).
Environmental exposure controls	:	Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid. Paste.
Colour	:	Black
Odour	:	Characteristic
Melting point/freezing point	:	No data available
Boiling point or initial boiling point and boiling range	:	No data available
Flammability	:	No data available
Lower and upper explosion limit	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	No data available
Kinematic viscosity	:	No data available
Solubility	:	No data available
Partition coefficient n-octanol/water (log value)	:	Not applicable
Vapour pressure	:	No data available
Density and/or relative density	:	No data available
Relative vapour density	:	No data available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosive properties	:	None
Oxidising properties	:	None

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Protect from heat and direct sunlight.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature. In case of fire: Carbon dioxide. Carbon monoxide. Toxic gases and vapours. Nitrogen oxides.

SECTION 11: Toxicological information

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

Acute toxicity : Not classified

Based on available data, the classification criteria are not met

2,4,6-tris-(Dimethylaminomethyl)phenol (90-72-2)	
LD50 oral rat	2169 mg/kg

Skin corrosion/irritation	:	Causes severe skin burns and eye damage.
Serious eye damage/irritation	:	Causes serious eye damage.
Respiratory or skin sensitisation	:	Not classified

Based on available data, the classification criteria are not met

Germ cell mutagenicity	:	Not classified Based on available data, the classification criteria are not met
Carcinogenicity	:	Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	:	Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	:	Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	:	Not classified Based on available data, the classification criteria are not met
Aspiration hazard	:	Not classified Based on available data, the classification criteria are not met

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disruption for human health : The mixture has no endocrine disrupting properties.

11.2.2. Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

2,4,6-tris-(Dimethylaminomethyl)phenol (90-72-2)	
LC50 fish	> 100 mg/l 96 h, Cyprinus carpio
EC50 crustacean	> 100 mg/l 48 h, Daphnia magna
EC50 algae	46.7 mg/l 72 h, Raphidocelis subcapitata
NOEC algae	6.44 mg/l 72 h, Raphidocelis subcapitata

12.2. Persistence and degradability

2,4,6-tris-(Dimethylaminomethyl)phenol (90-72-2)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	4 %, 28 d (OECD 301D)

12.3. Bioaccumulative potential

2,4,6-tris-(Dimethylaminomethyl)phenol (90-72-2)	
Partition coefficient n-octanol/water (Log Pow)	-0.66 (21.5 °C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

Endocrine disruption for the environment : The mixture has no endocrine disrupting properties.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	:	Dispose in a safe manner in accordance with local/national regulations.
Waste treatment methods	:	Dispose of this material and its container at hazardous or special waste collection point. Do not empty into drains.
Waste disposal recommendations	:	Empty the packaging completely prior to disposal. When totally empty, containers are recyclable like any other packing.
European List of Waste (LoW) code	:	08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances
Waste code	:	The valid EWC waste code numbers are source related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

14.1. UN number or ID number

UN-No. (ADR)	:	UN 2735
UN-No. (IMDG)	:	UN 2735
UN-No. (IATA)	:	UN 2735

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	AMINES, LIQUID, CORROSIVE, N.O.S. (2,4,6-tris(dimethylaminomethyl)phenol)
Proper Shipping Name (IMDG)	:	AMINES, LIQUID, CORROSIVE, N.O.S. (2,4,6-tris(dimethylaminomethyl)phenol)
Proper Shipping Name (IATA)	:	Amines, liquid, corrosive, n.o.s. (2,4,6-tris(dimethylaminomethyl)phenol)
Transport document description (ADR)	:	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (2,4,6-tris(dimethylaminomethyl)phenol), 8, III, (E)
Transport document description (IMDG)	:	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (2,4,6-tris(dimethylaminomethyl)phenol), 8, III
Transport document description (IATA)	:	UN 2735 Amines, liquid, corrosive, n.o.s. (2,4,6-tris(dimethylaminomethyl)phenol), 8, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	:	8
Danger labels (ADR)	:	8

:



IMDG

Transport hazard class(es) (IMDG)	:	8
Danger labels (IMDG)	:	8

:



IATA

Transport hazard class(es) (IATA)	:	8
Danger labels (IATA)	:	8

:



14.4. Packing group

Packing group (ADR)	:	III
Packing group (IMDG)	:	III
Packing group (IATA)	:	III

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available.

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	C7
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	5L
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	:	MP19

Portable tank and bulk container instructions (ADR)	:	T7
Portable tank and bulk container special provisions (ADR)	:	TP1, TP28
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Hazard identification number (Kemler No.)	:	80
Orange plates	:	
Tunnel restriction code (ADR)	:	E

Transport by sea

Special provisions (IMDG)	:	223, 274
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, LP01
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP1, TP28
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	A
Segregation (IMDG)	:	SGG18, SG35

Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y841
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	852
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	856
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3, A803
ERG code (IATA)	:	8L

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List).

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List.

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals).

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants).

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer).

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors).

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances).

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Data sources : 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Changes compared to the previous version : General revision

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	The effective concentration of substance that causes 50% of the maximum response (Median Effective Concentration)
IATA	International Air Transport Association
IMDG	“International Maritime Dangerous Goods Code” for the transport of dangerous goods by sea
LC50	Lethal Concentration to 50 % of a test population (Median Lethal Concentration)
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
NOEC/L	No Observed Effect Concentration/Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No-Effect Concentration
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
STP	Sewage Treatment Plant
UFI	Unique Formula Identifier
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-phrases:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.