



AZ 100 Remover

Substance No.: SXR065436
Version 21

Revision Date 18.04.2013

Print Date 18.04.2013

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

1.1 Product identifier

Trade name : AZ 100 Remover

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

Use of the Substance/Mixture : Electronic industry
Intermediate for electronic industry

1.3 Details of the supplier of the safety data sheet

Company : AZ Electronic Materials (Germany) GmbH
Rheingaustrasse 190-196 ,
65203 Wiesbaden Germany

Telephone : +49 (0)611 962 8563
E-mail address : PSE@az-em.com

Responsible/issuing person : Product Safety:
+49(0)6126-229248 or +49(0)6126-227340

1.4 Emergency telephone number

Emergency telephone number : +49 69 305 6418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

GHS Classification

Corrosive to metals, Category 1 H290: May be corrosive to metals.
Skin corrosion, Category 1B H314: Causes severe skin burns and eye damage.

Classification (67/548/EEC, 1999/45/EC)

Corrosive R34: Causes burns.

2.2 Label elements

GHS-Labeling



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Symbol(s)

:



Signal word

: Danger

Hazard statements

: H290
H314

May be corrosive to metals.
Causes severe skin burns and eye damage.

Precautionary statements

: **Prevention:**
P280

Wear protective gloves/ protective clothing/
eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do
NOT induce vomiting.

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

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

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

Hazardous components which must be listed on the label:

- 78-96-6 1-aminopropan-2-ol

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical characterization

A preparation of organic solvents.

Hazardous components

1-aminopropan-2-ol

CAS-No. : 78-96-6
EC-No. : 201-162-7
Registration number : 01-2119475331-43-xxxx
Classification(67/548/EEC) : C; R34



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Classification : Acute Tox. 4; H312
(REGULATION (EC) No 1272/2008) Skin Corr. 1B; H314
Concentration [%] : $\geq 25 - < 50$

WEL substance :

Dipropylene glycol methyl ether

CAS-No. : 34590-94-8
EC-No. : 252-104-2
Registration number : 01-2119450011-60-xxxx

Concentration [%] : $\geq 50 - \leq 100$

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Remove soiled or soaked clothing immediately
If someone exposed to the product feels unwell, contact a doctor and show this safety data sheet.
Adhere to personal protective measures when giving first aid
- Inhalation : Remove the casualty into fresh air and keep him calm.
Call in a physician immediately and show him the Safety Data Sheet.
- Skin contact : Wash off immediately with plenty of water for at least 15 minutes.
Call in a physician immediately and show him the Safety Data Sheet.
- Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Remove contact lenses.
- Ingestion : Do NOT induce vomiting.
If conscious, drink plenty of water.
Call in a physician immediately and show him the Safety Data Sheet.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.



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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray jet
Foam
Dry powder
Carbon dioxide (CO₂)

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : In case of fires, hazardous combustion gases are formed:
Carbon monoxide (CO)
Nitrous gases (NO_x)

5.3 Advice for firefighters

Special protective equipment for firefighters : Well closed full protective clothing (coat and pants) including helmet.
Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : See: Exposure controls and personal protection.

6.2 Environmental precautions

Environmental precautions : Do not allow entry to drains, water courses or soil

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.
Clean contaminated floors and objects thoroughly while observing environmental regulations.

6.4 Reference to other sections

Additional advice : Information regarding Safe handling, see chapter 7.
Information regarding personal protective measures see,



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chapter 8.
Information regarding Waste Disposal, see chapter 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Use only in area provided with appropriate exhaust ventilation.
- Advice on protection against fire and explosion : Development of explosive gas mixtures possible, therefore the working temperature should be kept at least 15 °C below the flash point of solvent mixtures, otherwise explosion protective measures should be taken.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep only in the original container
- Further information on storage conditions : Keep containers tightly closed in a dry, cool and well-ventilated place.
Protect from frost, heat and sunlight.
- Advice on common storage : Do not store or transport together with foodstuffs
- Storage period : 12 Months

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Components	:	Dipropylene glycol methyl ether
CAS-No.	:	34590-94-8
Value	:	TWA
Control parameters	:	50 ppm 308 mg/m ³
Update	:	2000-06-16
Basis	:	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skin Indicative

DNEL



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1-aminopropan-2-ol : End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 8,5 mg/kg

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
2,1 mg/kg

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 0,67 mg/m³

Dipropylene glycol methyl ether : End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 15,0 mg/kg

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 37,2 mg/m³

End Use: Workers
Exposure routes: Ingestion
Potential health effects: Long-term systemic effects
1,67 mg/kg

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
65,0 mg/kg

End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 310 mg/m³

PNEC
1-aminopropan-2-ol : Fresh water
Value: 0,0327 mg/l

Marine water
Value: 0,00327 mg/l

Fresh water sediment



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	Value: 0,177 mg/kg
	Marine sediment Value: 0,0177 mg/kg
	Soil Value: 0,0161 mg/kg
Dipropylene glycol methyl ether	: Fresh water Value: 19,0 mg/l
	Marine water Value: 1,9 mg/l
	Fresh water sediment Value: 70,2 mg/kg
	Marine sediment Value: 7,02 mg/kg
	Soil Value: 2,74 mg/kg

8.2 Exposure controls

Engineering measures

See chapter 7; no measures exceeding the ones mentioned are necessary.

Personal protective equipment

Respiratory protection	: Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure
Hand protection	: Break through time: > 10 min Glove thickness: > 0,4 mm For short-term exposure (splash protection): Nitrile rubber gloves. Remarks: These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used.
Eye protection	: Tightly fitting safety goggles
Skin and body protection	: Protective suit
Hygiene measures	: When using do not eat, drink or smoke. Keep away from food and drink.

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Wash hands before breaks and at the end of workday.
Use barrier skin cream.

Protective measures : Do not inhale vapours
Avoid contact with eyes and skin
Observe the usual precautions for handling chemicals.

Environmental exposure controls

General advice : Do not allow entry to drains, water courses or soil

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Form : Liquid
Colour : slightly yellowish
Odour : slightly ammonia-like

Safety data

Flash point : 81 °C
Ignition temperature : not determined
Thermal decomposition : not determined
Lower explosion limit : not determined
Upper explosion limit : not determined
Flammability (solid, gas) : not determined
Oxidizing properties : not determined
Auto-ignition temperature : not determined
Burning number : not determined
pH : app. 11,6, Concentration: 100,00 g/l (20 °C)
Freezing point : not determined
Boiling range : 159 - 194 °C
Sublimation point : not determined
Vapour pressure : app. 40 hPa, 80 °C
Density : approx. 0,947 g/cm³, 20 °C
Water solubility : miscible in all proportions
Partition coefficient:
n-octanol/water : not determined
Solubility in other solvents : not determined
Viscosity, dynamic : approx. 6,7 - 7,7 mPas
Viscosity, kinematic : not determined
Relative vapour density : not determined
Corrosive in contact with
metals : Corrosive to metals
Evaporation rate : not determined



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9.2 Other information

Further information : Remarks: Corrosive effects on Aluminum and Zink.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Reactions with acids.
Reactions with oxidising agents.

10.4 Conditions to avoid

Conditions to avoid : no data available

10.5 Incompatible materials

Materials to avoid : Oxidizing agents
Strong acids

10.6 Hazardous decomposition products

Hazardous decomposition products : when handled and stored appropriately no dangerous decomposition products are known

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product

Acute oral toxicity : no data available
Acute inhalation toxicity : no data available
Acute dermal toxicity : no data available
Skin corrosion/irritation : Result: Causes burns., OECD 404
Serious eye damage/eye irritation : no data available
Respiratory or skin : no data available

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sensitisation

Components:

1-aminopropan-2-ol :

Acute oral toxicity : LD50: > 2.000 mg/kg, rat
Acute dermal toxicity : LD50: 1.100 mg/kg, rabbit
Skin corrosion/irritation : rabbit, Result: Corrosive
Serious eye damage/eye irritation : rabbit, Result: Corrosive, Classification: Risk of serious damage to eyes.

Dipropylene glycol methyl ether :

Acute oral toxicity : LD50: > 5.000 mg/kg, rat
Acute dermal toxicity : LD50: 9.510 mg/kg, rabbit

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : no data available
Toxicity to daphnia and other aquatic invertebrates : no data available
Toxicity to bacteria : EC0: app. 2.500 mg/l

Components:

1-aminopropan-2-ol :

Toxicity to fish : LC50: > 100 mg/l, 96 h, *Leuciscus idus* (Golden orfe), static test, DIN 38412
Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l, 48 h, *Daphnia magna* (Water flea), static test
Toxicity to algae : EC50: > 10 mg/l, 72 h, *Desmodesmus subspicatus* (green algae), static test

Dipropylene glycol methyl ether :

Toxicity to fish : > 1.000 mg/l, 96 h, *Poecilia reticulata* (guppy), static test
Toxicity to daphnia and other aquatic invertebrates : LC50: 1.919 mg/l, 48 h, *Daphnia magna* (Water flea), static test

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Toxicity to algae : LC50: > 1.000 mg/l, 96 h, Crangon crangon (shrimp), semi-static test
Toxicity to algae : > 969 mg/l, 96 h, Pseudokirchneriella subcapitata (green algae), Growth inhibition

12.2 Persistence and degradability

Product:

Biodegradability : > 70 %, Result: inherently biodegradable, OECD 302 B

Components:

1-aminopropan-2-ol :

Biodegradability : aerobic, > 60 %, Result: Readily biodegradable., Exposure time: 28 d

Dipropylene glycol methyl ether :

Biodegradability : 75 %, Result: Readily biodegradable., Exposure time: 28 d, OECD 301 F,
According to the results of tests of biodegradability this product is considered as being readily biodegradable.

12.3 Bioaccumulative potential

Components:

1-aminopropan-2-ol :

Bioaccumulation : Bioconcentration factor (BCF): 0,11,
Bioaccumulation is unlikely.

Dipropylene glycol methyl ether :

Bioaccumulation : Bioconcentration factor (BCF): < 100,
Bioaccumulation is unlikely.

12.4 Mobility in soil

Components:

1-aminopropan-2-ol :

Distribution among environmental compartments : Adsorption/Soil, Koc: 1,789, log Koc: 0,253, Highly mobile in soils

Dipropylene glycol methyl ether :

Distribution among environmental compartments : Koc: 0,28, Highly mobile in soils

12.5 Results of PBT and vPvB assessment

Components:

1-aminopropan-2-ol :

Assessment : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other adverse effects

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Product:

Additional ecological information : Details for used product (with detached AZ Photoresist-Layer).

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent Authorities

Contaminated packaging : Packaging that cannot be cleaned should be disposed of as product waste

SECTION 14: Transport information

ADR

UN number : 2735
Description of the goods : AMINES, LIQUID, CORROSIVE, N.O.S.
(1-Aminopropan-2-ol)
Environmentally hazardous : no

IATA

UN number : 2735
Description of the goods : Amines, liquid, corrosive, n.o.s.
(1-Aminopropan-2-ol)
Class : 8
Packing group : II
Labels : 8
Environmentally hazardous : no

IMDG

UN number : 2735
Description of the goods : AMINES, LIQUID, CORROSIVE, N.O.S.
(1-Aminopropan-2-ol)
Class : 8
Packing group : II
Labels : 8
EmS Number 1 : F-A
EmS Number 2 : S-B
Marine pollutant : no

RID

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UN number : 2735
Description of the goods : AMINES, LIQUID, CORROSIVE, N.O.S.
(1-Aminopropan-2-ol)
Environmentally hazardous : no

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

: Neither banned nor restricted

Candidate List of Substances of Very High Concern for Authorisation

: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

EU. REACH - Annex XIV: List of substances subject to authorisation

: Neither banned nor restricted

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for a mixture.

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

R34 Causes burns.

Full text of H-Statements referred to under sections 2 and 3.

H290 May be corrosive to metals.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.

Decimal notation: "Thousands" places are identified with a dot (example: 2.000 mg/kg means "two thousand mg/kg"). Decimal places are identified with a comma (example: 1,35 g/cm³)

Further information

Further information : Observe national and local legal requirements

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