1. Identification of the substance/preparation and company

Trade name
AZ 726 MIF Developer (DE)

Material number: 100558

Use of the substance/preparation.
Industry sector : Electronic industry
Type of use : Intermediate for electronic industry

Identification of the company
Clariant AZ (Deutschland) AG
Am Unisys-Park 1
65840 Sulzbach
Telephone no. : +49 6196 757-6100

Information about the substance/preparation
Product Safety
+49(0)6103-8079450 or +49(0)6126-227340

Emergency telephone number : +49 69 305 6418

2. Composition/information on ingredients

Chemical characterization
Aqueous alkaline preparation.

Hazardous ingredients
TMAH, 25% aqueous solution
Concentration : < 20 %
CAS number : 75-59-2
EINECS number : 200-882-9
Hazard symbols C
R phrases 21 35

3. Hazards identification

Causes burns.

4. First aid measures

General information
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

After inhalation
Remove the casualty into fresh air and keep him calm.
Call in a physician immediately and show him the Safety Data Sheet.
After contact with skin
Call in a physician immediately and show him the Safety Data Sheet.

After contact with eyes
Rinse immediately with gently running water for 15 minutes, maintaining eyelids open. Consult at once an ophthalmologist or a physician.

After ingestion
Do not induce vomiting.
Call in a physician immediately and show him the Safety Data Sheet.
Let plenty of water be drunk in small gulps.

Advice to doctor

Treatment
Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media
compatible with all usual extinguishing media

Special hazards from the substance itself, its combustion products or from its vapours
In case of fires, hazardous combustion gases are formed: Carbon monoxide (CO)
Nitrous gases (NOx)

Special protective equipment for firefighting
Well closed full protective clothing (coat and pants) including helmet.
Use self-contained breathing apparatus

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

6. Accidental release measures

Personal precautions
See: Exposure controls and personal protection.

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

Methods for cleaning up/taking up
Pick up with liquid binding materials and if necessary fill in containers capable of being locked.
Containers in which spilt substance has been collected must be adequately labelled
Dispose of absorbed material in accordance with the regulations.
Clean contaminated floors and objects thoroughly, observing environmental regulations

Additional information
Information regarding Safe handling, see chapter 7.
Information regarding personal protective measures see, chapter 8.
Information regarding Waste Disposal, see chapter 13.

7. Handling and storage
Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary).

Advice on protection against fire and explosion

Observe the general rules of industrial fire protection

Requirements for storage rooms and vessels

Keep only in the original container

Advice on storage compatibility

Do not store or transport together with foodstuffs

Further information on storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place

8. Exposure controls/personal protection

Additional advice on system design

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

General protective measures

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

Hygiene measures

At work do not eat, drink, smoke or take drugs.
Keep away from foodstuffs and beverages.
Wash hands before breaks and after work.
Use barrier skin cream.

Respiratory protection:

Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure

Hand protection:

For short-term exposure (splash protection):
Nitrile rubber gloves.
Minimum breakthrough time / gloves: > 10 min
Minimum thickness / gloves: > 0,4 mm

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 glasses

Body protection:

Protective clothing

9. Physical and chemical properties

Form:

Liquid

Colour:

Colourless
Odour : slight, product specific
Boiling temperature : approx. 100 °C
Flash point : Not applicable
Ignition temperature : not determined
Self-ignition temperature : not determined
Lower explosion limit : not determined
Upper explosion limit : not determined
Vapour pressure : approx. 23 mbar (20 °C)
Density : approx. 1 g/cm³ (20 °C)
Solubility in water : miscible in all proportions
pH value : approx. 13 (20 °C)
Octanol/water partition coefficient (log Pow) : not reasonable
Viscosity (dynamic) : approx. 1 mPa.s (20 °C)

Further information
Corrosive effects on Aluminum and Zink.

10. Stability and reactivity
Thermal decomposition : No decomposition if used as prescribed.
Hazardous reactions
When heated over 110 °C, evolution of Trimethylamine and Methanol can take place.
Hazardous decomposition products
when handled and stored appropriately no dangerous decomposition products are known

11. Toxicological information
Acute dermal toxicity : LD50 449 mg/kg (rat)
Method : OECD 402 - EEC 92/69, B.3
The information refers to the 25% aqueous solution of tetramethylammonium hydroxide.
Remarks
Causes burns

12. Ecological information
Biodegradability : readily degradable
Method : OECD 301B / EEC 92/69 C4
Daphnia toxicity :  
EC50  12 mg/l (48 h, Daphnia magna)  
Method : OECD 202.I  
The information refers to the 25% aqueous solution of tetramethylammonium hydroxide.

Algae toxicity :  
EC50  > 1.000 mg/l (72 h, Scenedesmus subspicatus)  
Method : OECD 201  
The information refers to the 25% aqueous solution of tetramethylammonium hydroxide.

Remarks  
Do not dispose of in the environment.

## 13. Disposal considerations

**Product**  
Product should be 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

**Uncleaned packaging**  
Packaging that cannot be cleaned should be disposed of as product waste

## 14. Transport information

### ADR
- Proper shipping name: Caustic alkali liquid, n.o.s.  
- Class: 8  
- Packing group: III  
- UN no.: UN 1719  
- Primary risk: 8  
- Hazard no.: 80  
- Remarks: Shipment permitted  
- Hazard inducer(s): Tetramethylammonium Hydroxide, Solution

### ADNR
- Proper shipping name: Caustic alkali liquid, n.o.s.  
- Class: 8  
- Packing group: III  
- UN no.: UN 1719  
- Primary risk: 8  
- Remarks: Shipment permitted  
- Hazard inducer(s): Tetramethylammonium Hydroxide, Solution
RID
Proper shipping name: Caustic alkali liquid, n.o.s.
Class: 8
Packing group: III
UN no. UN 1719
Primary risk: 8
Hazard no.: 80
Remarks: Shipment permitted
Hazard inducer(s): Tetramethylammonium Hydroxide, Solution

IATA
Proper shipping name: Caustic alkali liquid, n.o.s.
Class: 8
Packing group: III
UN no. UN 1719
Primary risk: 8
Remarks: Shipment permitted
Hazard inducer(s): Tetramethylammonium Hydroxide, Solution

IMDG
Proper shipping name: Caustic alkali liquid, n.o.s.
Class: 8
Packing group: III
UN no. UN 1719
Primary risk: 8
Remarks: Shipment permitted
Hazard inducer(s): Tetramethylammonium Hydroxide, Solution
EmS: 8-06

15. Regulatory information

Labelling in accordance with EC-Directives
The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances.
Labelling on the basis of our own findings.

Hazard symbols
C Corrosive

Hazardous component(s) to be indicated on label
Tetramethylammonium hydroxide

R phrases
34 Causes burns.

S phrases
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
16. Other information

Observe national and local legal requirements

Text of the R-phrases which are allocated to the ingredients/components mentioned in section 2 of this Safety Data Sheet.

<table>
<thead>
<tr>
<th>R-phrase</th>
<th>Text</th>
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<tbody>
<tr>
<td>21</td>
<td>Harmful in contact with skin.</td>
</tr>
<tr>
<td>35</td>
<td>Causes severe burns.</td>
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</tbody>
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This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.