MATERIAL SAFETY DATA SHEET
AZ Developer 1:1

Identification of the company:
AZ Electronic Materials USA Corp.
70 Meister Avenue
Somerville, NJ 08876
Telephone No.: 800-515-4164

Information on the substance/preparation
Product Safety: 908-429-3562
Emergency Tel. number: 800-424-9300 CHEMTREC

Trade name: AZ Developer 1:1 (DE)

Section 02 - Composition information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-no. (Trade secret no.)</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium metasilicate</td>
<td>8834-92-0</td>
<td>1.00 - 3.00</td>
</tr>
</tbody>
</table>

Section 03 - Hazardous identification

Emergency overview: Clear, colorless liquid., No odor., Water soluble., May cause mild eye and skin irritation.

Expected route of entry

- Skin contact: yes
- Ingestion: no
- Inhalation: yes
- Eye contact: Contact with liquid and mist.
- Skin absorption: no

Health effects of exposure:

Component information:

Known effects on other illnesses: Preexisting skin and eye conditions may be aggravated.

Listed carcinogen: IARC: NO  NTP: NO  OSHA: NO

HMIS:
Health: 2  Flammability: 0  Reactivity: 0  Personal protection: X

NFPA:
Health: 2  Flammability: 0  Reactivity: 0  Special notice: NONE

Section 04 - First aid measures

After inhalation: Remove victim to fresh air. Consult physician if irritation occurs.

After contact with skin: Immediately remove contaminated clothing and wash affected area thoroughly with soap and water. Consult physician if exposure is extensive or if irritation occurs.

After contact with eyes: Flush thoroughly with water for 15 minutes. Get immediate medical help.

After ingestion: If person is conscious, give water or milk to dilute stomach contents. Never give anything by mouth to an unconscious person. Consult physician. Do not induce vomiting.

Section 05 - Fire fighting measures

Flash point: Water-based material containing no combustible components.

Suitable extinguishing media: compatible with all usual extinguishing media

Section 06 - Accidental release measures

Steps to be taken in case: Wearing appropriate personal protective equipment, contain
of spill or leak: spill, collect onto inert absorbent, and place in a suitable container.

Section 07 - Handling and Storage

Advice on safe handling:
- Use only with adequate ventilation and proper protective eyewear, gloves, and clothing.
- Avoid breathing vapors and contact with skin, eyes, and clothing.
- Wash thoroughly after handling.
- Keep container closed.

Further information for storage conditions:
- Transport and store under dry conditions tightly closed.
- Store at appropriate temperature. See label for details.
- Store in original container.
- Keep from freezing.

Section 08 - Exposure Control / personal protection

Respiratory protection: If airborne concentrations pose a health hazard, become irritating, or exceed recommended limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29CFR1910.134.

Hand protection: Rubber gloves.

Eye protection: Safety eyewear to protect against splashes.

Body protection: Clothing suitable to prevent skin contact.

Additional advice on system design: Use local exhaust ventilation.

Section 09 - Physical and chemical properties

- Form: Liquid
- Color: colourless
- Odor: odourless
- pH value: approx. 13 (20 °C)
- Density: approx. 1 g/cm³

20 °C
Boiling temperature: approx. 100 °C
Vapor pressure: approx. 23 mbar
20 °C
Viscosity, dynamic: approx. 1 mPas
20 °C
Loss on drying: 97 %

Section 10 - Stability and reactivity

Hazardous reactions: When handled and stored appropriately no dangerous reactions are known
Hazardous polymerization: Will not occur.
Conditions to avoid: Avoid contact with strong acids.

Section 11 - Toxicological information

Acute oral toxicity: No data.

Skin irritation: rabbit
Method: Draize Test
non-irritant

Skin irritation: rabbit
D.O.T. four hour rabbit skin test of this product was negative for skin corrosion.

Eye irritation: rabbit eye
Method: Draize test
moderate eye irritant.

Section 12 - Ecological information

Further ecological information: Harmful effects to bacteria: according to experience, is not
harmful in purification plants after neutralisation in quantities <
10 g/l

4/7
Section 13 - Disposal considerations

Product: Consult local, state, and federal regulations. This product would be considered a hazardous waste under RCRA due to high pH unless neutralized prior to disposal.

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

Section 14 - Transport information

Land transport
- DOT: Not restricted

Sea transport
- IMDG: Not restricted

Air transport
- ICAO/IATA-DGR: Not restricted

Section 15 - Regulatory information

TSCA Status: All components of this product are listed on the TSCA Inventory.

SARA (section 311/312):
- Reactive hazard: no
- Pressure hazard: no
- Fire hazard: no
- Immediate/acute: yes
- Delayed/chronic: no

SARA 313 information: This product is not subject to SARA Title III Section 313 reporting requirements under 40 CFR 372.

Clean water act: This product is not a Clean Water Act priority pollutant.
Section 16 - Other information

Further information
The physical, chemical, and toxicological properties of this material have not been thoroughly investigated. Therefore, it should be employed under the supervision of an individual technically qualified to understand its potential hazards.

Label information

CAUTION!

Alkaline solution. Eye irritant. Causes mild skin irritation. Dry or concentrated residue may be corrosive.

Avoid contact with skin, eyes, and clothing. Avoid breathing mist or vapor. Use only with adequate ventilation, and proper protective eyewear, gloves, and clothing. Wash thoroughly after handling. Keep container closed.

In case of contact, flush eyes with plenty of water for 15 minutes. Get medical attention immediately. Flush affected skin areas with water, and wash with mild soap and water. Remove contaminated clothing. If INHALED, remove individual to fresh air. If breathing is difficult, give oxygen. If ingested, give water or milk to dilute stomach contents. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately for ingestion or breathing problems or if skin contact is extensive.

If spilled, wear protective clothing, absorb with inert material, collect and place in a chemical waste container. Rinse residue with water.

Keep sealed in original container. Avoid freezing and direct sunlight. Empty container may contain harmful residue. Product should be stored > 32 F (0 C).

The solvent in this product is not photochemically reactive per Rule 102 of the California South Coast Air Quality Management District.

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications. (R) and TM indicate trademarks of AZ Electronic Materials USA Corp., its business partners and suppliers.