SECTION 1. IDENTIFICATION

Product identifier
Product name : AZ Developer

Product number : 697328

Recommended use of the chemical and restrictions on use
Recommended use : Intermediate for electronic industry

Details of the supplier of the safety data sheet

Emergency telephone : 1-800-424-9300 CHEMTREC (USA)
1-703-741-5970 CHEMTREC (International)
24 Hours/day; 7 Days/week

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Eye irritation : Category 2A

GHS label elements
Hazard pictograms : ![Warning]

Signal Word : Warning

Hazard Statements : H319 Causes serious eye irritation.

Precautionary Statements : Prevention:
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.
Response:
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/attention.

Other hazards
The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 3.8679 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Concentration (% w/w)</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disodium metasilicate</td>
<td>≥ 1 - ≤ 5</td>
<td>6834-92-0</td>
</tr>
<tr>
<td>tri-sodium phosphate</td>
<td>≤ 3</td>
<td>7601-54-9</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

Most important symptoms and effects, both acute and delayed: None known.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Product is compatible with standard fire-fighting agents.

Specific hazards during fire fighting: Not combustible.
SECTION 6. ACCIDENTAL RELEASE MEASURES

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Conditions for safe storage, including any incompatibilities

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>tri-sodium phosphate</td>
<td>7601-54-9</td>
<td>STEL</td>
<td>5 mg/m3</td>
<td>US WEEL</td>
</tr>
</tbody>
</table>

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: liquid
Form: liquid
Color: colorless
Odor: odorless
Odor Threshold: No information available.

pH: ca. 13 at 68 °F (20 °C)
Melting point: No information available.
Boiling point/boiling range: approximately 212 °F (100 °C)
Flash point: Not applicable
Evaporation rate: Note: No data available
Flammability (solid, gas): Not applicable
Lower explosion limit: No information available.
Upper explosion limit: No information available.
Vapor pressure: No information available.
Relative vapor density  
No data available

Density  
approximately 1 g/cm³  
at 68 °F (20 °C)

Relative density  
No information available.

Water solubility  
No information available.

Partition coefficient: n-octanol/water  
No information available.

Autoignition temperature  
No information available.

Decomposition temperature  
No information available.

Viscosity, dynamic  
approximately 1 mPas  
at 68 °F (20 °C)

Explosive properties  
No information available.

Oxidizing properties  
No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity  
Corrosive to Metals

Possibility of hazardous reactions  
Reacts with the following substances:  
Strong oxidizing agents  
Strong bases

Incompatible materials  
Aluminum  
Zinc

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Product
Carcinogenicity
IARC  
No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA  
No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.

NTP  
No ingredient of this product present at levels greater than or equal to 0.1% is listed as a human carcinogen by NTP.

4 / 9
equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Likely route of exposure
Inhalation, Eye contact, Skin contact

Acute oral toxicity
No data available

Skin irritation
Rabbit
Result: No skin irritation
OECD Test Guideline 404

Eye irritation
Rabbit
Result: Irritating to eyes.
OECD Test Guideline 405

Components

Disodium metasilicate (6834-92-0):

Acute oral toxicity
LD50 Rat: 1,152 mg/kg (ECHA)

Acute dermal toxicity
LD50 Rat: > 5,000 mg/kg
US-EPA (ECHA)

Skin irritation
Rabbit
Result: Corrosive
OECD Test Guideline 404
(ECHA)

Sensitization
Local lymph node assay (LLNA) Mouse
Result: Not a skin sensitiser.
Method: OECD Test Guideline 429

tri-sodium phosphate (7601-54-9):

Acute oral toxicity
LD50 Rat: > 2,000 mg/kg
OECD Test Guideline 420
Acute inhalation toxicity
LC50 Rat: > 0.83 mg/l; 4 h ; dust/mist sodium dihydrogen phosphate
OECD Test Guideline 403

Skin irritation
Result: Skin irritation

Eye irritation
Rabbit
Result: irritating
US-EPA

Sensitization
Sensitization test: Mouse
Result: negative
Method: OECD Test Guideline 429
sodium dihydrogen phosphate
STOT-single exposure
Assessment: May cause respiratory irritation.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
Product

Persistence and degradability
No information available.

Bioaccumulative potential
No information available.

Mobility in soil
No information available.

Components

Disodium metasilicate (6834-92-0):

Toxicity to fish
semi-static test LC50 Danio rerio (zebra fish): 210 mg/l; 96 h
Analytical monitoring: no
ISO 7346/1 (ECHA)

Toxicity to daphnia and other aquatic invertebrates
static test Daphnia magna (Water flea): 1,700 mg/l; 48 h

Toxicity to algae
Growth inhibition ErC50 Desmodesmus subspicatus (green algae): > 345.4 mg/l; 72 h
DIN 38412 part 9 (ECHA)
Toxicity to bacteria
Respiration inhibition activated sludge: > 100 mg/l; 3 h
Analytical monitoring: no
OECD Test Guideline 209 (ECHA)

Partition coefficient: n-octanol/water
Not applicable for inorganic substances

**tri-sodium phosphate (7601-54-9):**

Toxicity to fish
semi-static test LC50 Oncorhynchus mykiss (rainbow trout): > 100 mg/l; 96 h
Analytical monitoring: yes
OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates
static test EC50 Daphnia magna (Water flea): > 100 mg/l; 48 h
Analytical monitoring: yes
OECD Test Guideline 202

Toxicity to algae
static test NOEC Desmodesmus subspicatus (green algae): > 100 mg/l; 72 h
Analytical monitoring: yes
OECD Test Guideline 201

static test EC50 Desmodesmus subspicatus (green algae): > 100 mg/l; 72 h
Analytical monitoring: yes
OECD Test Guideline 201

**Biodegradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

Partition coefficient: n-octanol/water
Not applicable for inorganic substances

PBT/vPvB: Not applicable for inorganic substances

**SECTION 13. DISPOSAL CONSIDERATIONS**

RCRA number: D002

Yes -- If it becomes a waste as sold.

**SECTION 14. TRANSPORT INFORMATION**
Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity
tri-sodium phosphate 7601-54-9 5000lbs

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 302
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act
This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act
The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:
tri-sodium phosphate 7601-54-9

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:
tri-sodium phosphate 7601-54-9

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know
tri-sodium phosphate 7601-54-9
Pennsylvania Right To Know
Disodium metasilicate 6834-92-0
tri-sodium phosphate 7601-54-9

New Jersey Right To Know
Disodium metasilicate 6834-92-0
tri-sodium phosphate 7601-54-9

California Prop. 65
This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

DSL : This product or its components are listed on or compliant with the DSL.

TSCA : All components of the product are listed in the TSCA-inventory.

SECTION 16. OTHER INFORMATION

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.