



SAFETY DATA SHEET
AZ 400K Developer 1:4

Substance No.: GHSBBG7075
Version 4.0

Revision Date 09/05/2014
Print Date 10/03/2014

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AZ 400K Developer 1:4
Material No. : 10063823163
Product Use Description : Intermediate for electronic industry

Company : AZ Electronic Materials USA Corp.
70 Meister Ave.
Somerville, NJ 08876

Telephone : 1-908-429-3562
Telefax : 1-908-429-5982

Emergency telephone number : 1-800-424-9300 (CHEMTREC)

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards : CORROSIVE
MILD EYE IRRITANT
REPRODUCTIVE HAZARD

HMIS Classification : Health hazard: 2
Flammability: 0
Reactivity: 0
PPE:X



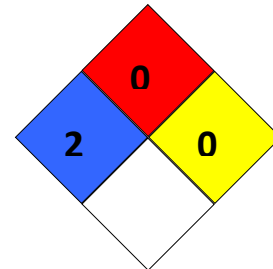
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NFPA Classification : Health hazard: 2
Fire Hazard: 0
Reactivity Hazard: 0
Special Hazards: NONE



GHS Classification

Hazard category, Hazard class : Corrosive to Metals, Category 1
Hazard category, Hazard class : Skin irritation, Category 3
Hazard category, Hazard class : Eye irritation, Category 2B
Hazard category, Hazard class : Reproductive toxicity, Sub-category 1B

GHS-Labeling

Symbol(s) :

Signal word : Danger

Hazard statements : May be corrosive to metals.
Causes mild skin irritation.
Causes eye irritation.
May damage fertility or the unborn child.

Precautionary statements : **Prevention:**
Do not handle until all safety precautions have been read and understood.
Keep only in original container.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue



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rinsing.
IF exposed or if you feel unwell: Call a POISON CENTER or doctor/ physician.
If eye irritation persists: Get medical advice/ attention.
Storage:
Store in a dry place. Store in a closed container.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Special labelling of certain mixtures :

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: < 2 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Component	CAS-No.	Weight percent
Potassium borates	20786-60-1	< 2

Non-hazardous ingredients

Component	CAS-No.	Weight percent
Water	7732-18-5	> 95

SECTION 4. FIRST AID MEASURES

First aid procedures

Inhalation : If inhaled, remove to fresh air. Keep respiratory tract clear. If breathing is difficult, give oxygen. Get medical attention if irritation develops and persists.

Skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.



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- Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Remove contact lenses.
- Ingestion : Never give anything by mouth to an unconscious person. If person is conscious, give water or milk to dilute stomach contents. Do not induce vomiting. Keep patient at rest and obtain immediate medical assistance
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SECTION 5. FIREFIGHTING MEASURES

Flammable properties

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

Fire fighting

- Suitable extinguishing media : Product itself is non-combustible; Fire extinguishing method of surrounding areas must be discussed.
- Further information : The product itself does not burn.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Protective equipment and precautions for firefighters

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Environmental precautions : Do not allow contact with soil, surface or ground water.
Prevent spreading by use of suitable barriers.
Local authorities should be advised if significant spillages cannot be contained.
- Methods for containment /
Methods for cleaning up : Wearing appropriate personal protective equipment, contain spill, ventilate area of spill or leak. Collect onto inert absorbent. Place in suitable container.
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SECTION 7. HANDLING AND STORAGE

Handling

Handling : Use only in area provided with appropriate exhaust ventilation.
Wear personal protective equipment.
Avoid inhalation of vapour or mist.

Storage

Further information on storage conditions : Keep containers tightly closed in a dry, cool and well-ventilated place.
Protect from frost, heat and sunlight.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Engineering measures

Engineering measures : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Eye protection : Safety eyewear to protect against splashes.

Hand protection : Rubber gloves

Skin and body protection : Clothing suitable to prevent skin contact.

Respiratory protection : Breathing apparatus needed only when aerosol or mist is formed.
Use NIOSH approved respiratory protection.

Hygiene measures : Observe the usual precautions when handling chemicals.



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state : liquid
Color : clear
colourless

Odor : odourless

Safety data

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

pH : ca. 13
at
68 °F (20 °C)

Freezing point : approx. 32 °F (0 °C)

Boiling point : approx. 212 °F (100 °C)

Density : approx. 1.018 g/cm³

Loss on drying : >= 98 %

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : Freezing conditions and high temperatures
Avoid contact with strong acids.
Avoid contact with alkaline materials.
Avoid contact with oxidizing agents.

Hazardous decomposition products : No hazardous decomposition products known.
Hazardous reactions : Hazardous polymerisation does not occur.
Note: Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Data for AZ 400K Developer 1:4



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Skin irritation : Species: rabbit
Result: Mild skin irritation
Classification: Irritating to skin.
Method: OECD
By analogy with a similar product.

Eye irritation : Species: rabbit
Result: Mild eye irritation
Classification: Irritating to eyes.
Method: OECD
By analogy with a similar product.

Toxicology Assessment

CMR effects : Reproductive toxicity:
Presumed human reproductive toxicant, May damage fertility.
May damage the unborn child., Source : Directive 67/548/EEC

SECTION 12. ECOLOGICAL INFORMATION

Data for AZ 400K Developer 1:4

Additional ecological information : No ecological testing was carried out on the preparation.
Do not allow to enter soil, waterways or waste water

SECTION 13. DISPOSAL CONSIDERATIONS

Further information : This product would be considered a hazardous waste under RCRA due to high pH unless neutralized prior to disposal.
Dispose of as special waste in compliance with local and national regulations.

Contaminated packaging : Empty containers should be taken to local recyclers for disposal.

RCRA hazardous waste : RCRA number: D002
Yes -- If it becomes a waste as sold.



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SECTION 14. TRANSPORT INFORMATION

DOT

Not restricted

IATA

UN number : 1719
Description of the goods : Caustic alkali liquid, n.o.s.
(Potassium borate)
Class : 8
Packing group : III
Labels : 8
Environmentally hazardous : no
Additional data for transport : PASSENGER AIRCRAFT SHIPMENT OF CONTAINERS
>2.5L NOT PERMITTED. CARGO AIRCRAFT ONLY!,
CARGO AIRCRAFT SHIPMENT OF CONTAINERS >5L NOT
PERMITTED.

IMDG

UN number : 1719
Description of the goods : CAUSTIC ALKALI LIQUID, N.O.S.
(Potassium borate)
Class : 8
Packing group : III
Labels : 8
EmS Number 1 : F-A
EmS Number 2 : S-B

Marine pollutant : no
Environmentally hazardous : no

SECTION 15. REGULATORY INFORMATION

Notification status

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

DSL : All components of this product are on the Canadian DSL.

WHMIS Classification : E: Corrosive Material



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Canadian PBT Chemicals : This product does not contain any components on the DSL that are classified as Persistent, Bioaccumulative and Toxic (PBT) under CEPA.

CERCLA Reportable Quantity :
Calculated RQ exceeds reasonably attainable upper limit.

Carcinogenicity

IARC No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302 Reportable Quantity : This material does not contain any components with a SARA 302 RQ.

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

SARA 313: 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

Ozone-Depletion Potential : 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).

US. Clean Air Act - Hazardous Air Pollutants (HAP)



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This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

US. Clean Air Act Section 112(r); Regulated toxic and flammable substances 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 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

US. Clean Air Act Section 111 SOCM Intermediate or Final Volatile Organic Compounds (VOC) - 40 CFR part 60.489

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM 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:

Potassium hydroxide	1310-58-3
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The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Potassium hydroxide	1310-58-3
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US State Regulations

Massachusetts Right To Know Components	:	No components are subject to the Massachusetts Right to Know Act.
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Pennsylvania Right To Know Components	:	Water	7732-18-5
		Potassium hydroxide	1310-58-3

New Jersey Right To Know Components	:	Water	7732-18-5
		Potassium borates	20786-60-1



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SECTION 16. OTHER INFORMATION

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. For any sub-heading within any section not addressed herein, no relevant information is determined or applicable. 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.

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