

Substance No.: GHSBBG7070

Version 2.7

Revision Date 09/24/2012 Print Date 09/24/2012

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AZ 400K DEVELOPER

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

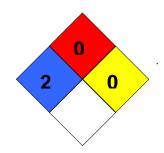
> SEVERE EYE IRRITANT REPRODUCTIVE EFFECTS MILD RESPIRATORY IRRITANT

HMIS Classification : Health hazard: 2

> Flammability: 0 Reactivity: 0 PPE:X

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

Serious eye damage/eye irritation, Category 2A

Hazard category, Hazard

Reproductive toxicity, Sub-category 1B

class

Hazard category, Hazard

class

Specific target organ toxicity - single exposure, Category 3



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GHS-Labelling

Symbol(s) :







Signal word : Danger

Hazard statements : May be corrosive to metals.

Causes serious eye irritation. May cause respiratory 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

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 well-ventilated place. Keep container tightly closed.

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: 10 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Component	CAS-No.	Weight percent
Potassium borates	20786-60-1	5 - 15
Potassium hydroxide	1310-58-3	2

Non-hazardous ingredients

Component	CAS-No.	Weight percent
Water	7732-18-5	> 85



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SECTION 4. FIRST AID MEASURES

First aid procedures

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 : 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.

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

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 fire fighting if

necessary.



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SECTION 6. ACCIDENTAL RELEASE MEASURES

: Do not allow contact with soil, surface or ground water. Environmental precautions

Prevent spreading by use of suitable barriers.

Local authorities should be advised if significant spillages

cannot be contained.

Methods for containment /

: Wearing appropriate personal protective equipment, contain Methods for cleaning up

spill, ventilate area of spill or leak. Collect onto inert

absorbent. Place in suitable container.

SECTION 7. HANDLING AND STORAGE

Handling

: Use only in area provided with appropriate exhaust ventilation. Handling

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

Potassium hydroxide	1310-58-3	C: 2 mg/m3	ACGIH
		C: 2 mg/m3	OSHA P0
		C: 2 mg/m3	NIOSH REI

Engineering measures

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

appropriate exhaust).

Personal protective equipment

Eye protection : Safety eyewear to protect against splashes.

Hand protection : Rubber gloves

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

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.

pΗ : approx. 12.9

Freezing point : approx. 32 °F (0 °C)

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

: 17.5 Torr Vapour pressure

at 68 °F (20 °C)

Corresp. to vapour pressure of water

Density : approx.1.085 g/cm3

Loss on drying : 88 %

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.



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SECTION 11. TOXICOLOGICAL INFORMATION

Data for AZ 400K DEVELOPER

Skin irritation : Species: rabbit

Result: No skin irritation Classification: not irritating

: Species: rabbit

Result: DOT four hour rabbit skin test of this product was

negative for corrosion.

Eye irritation : Species: rabbit

Result: severe eye irritant. Classification: Irritating to eyes.

Toxicology Assessment

CMR effects : Reproductive toxicity:

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

Data for Potassium hydroxide (1310-58-3)

Acute oral toxicity : LD50: 273 mg/kg

Species: rat

Source: OECD SIDS

: LD50: 284 mg/kg

Species: rat

Method: Calculation method

Source : NITE

Skin irritation : Result: Corrosive

Classification: Corrosive

Eye irritation : Result: corrosive

Classification: Corrosive



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12. ECOLOGICAL INFORMATION

Data for AZ 400K DEVELOPER

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 : Dispose of as special waste in compliance with local and

national regulations.

This product would be considered a hazardous waste under RCRA due to high pH unless neutralized prior to disposal.

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.

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



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SECTION 15. REGULATORY INFORMATION

Notification status

US.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

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

Potassium hydroxide 1310-58-3 1000 lbs

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

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

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.



1310-58-3

SAFETY DATA SHEET **AZ 400K DEVELOPER**

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Clean Air Act

Ozone-Depletion : This product neither contains, nor was manufactured with a **Potential** : 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)

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 SOCMI Intermediate or Final Volatile Organic Compunds (VOC) - 40 CFR part 60.489

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:

Potassium hydroxide 1310-58-3

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Potassium hydroxide 1310-58-3

US State Regulations

Massachusetts Right To : Potassium hydroxide 1310-58-3 **Know Components** Pennsylvania Right To : Water 7732-18-5 **Know Components** Potassium borates 20786-60-1 Potassium hydroxide 1310-58-3 **New Jersey Right To** 7732-18-5 : Water **Know Components** Potassium borates 20786-60-1

Potassium hydroxide



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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. 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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