

SAFETY DATA SHEET

In compliance with EC Regulations No.: 1907/2006, 830/2015 and 1272/2008 (CLP).

Date last modified: 27 December 2020 - version 3.0

SAFETY DATA SHEET GHS1108291

1 IDENTIFICATION (PRODUCT AND COMPANY INFORMATION)

<u>1.1 Product Identifier</u> Product Name: <u>BWT K1</u> Product Code #: 672008 (20 KG)

"Authentic KURITA formula of KURIBORN 304 produced by KURITA WATER INDUSTRIES"

1.2 Relevant identified uses of the substance or mixture and uses advised against

Intended Use: Industrial applications; Boiler Water Treatment.

Uses advised against: This product is not recommended for any industrial, professional or consumer use other than the Intended Uses above and the instructions written in this Safety Data Sheet.

1.3 Details of the supplier of the safety data sheet

Company/undertaking identification

Supplier/Manufacturer:

Marichem Marigases Hellas SA

Sfaktirias 64, 185 45 Piraeus, Greece Tel. No.: ++30 210 4148800 Fax No.: ++30 210 4133985 http://www.marichem-marigases.com

e-mail: mail@marichem-marigases.com

1.4 Emergency telephone number

Tel. No.: ++30 210 4148800 (including working hours)

Emergency Information: Inside U.S. and Canada: (800)-424-9300 (CHEMTREC) Outside U.S. and Canada: 1-703-527-3887 (CHEMTREC) National Emergency Centre (Greece): ++30 210 7793777

2 HAZARDOUS IDENTIFICATION

2.1 Classification of the mixture

Classification under EC 1272/2008 regulation - GHS classification.

HAZARDOUS INFORMATION: Acute toxic, other hazardous and corrosive substance **GHS CLASSIFICATION**

ACUTE TOXICITY-ORAL	: Category 4
SKIN CORROSION/IRRITATION	: Category 1
EYE DAMAGE/IRRITATION	: Category 1
SENSITIZATION-SKIN	: Category 1
GERM CELL MUTAGENICITY	: Category 2
CARCINOGENICITY	: Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): Category 1 HAZARDOUS TO THE AQUATIC ENVIRONMENT-ACUTE HAZARD : Category 3 HAZARDOUS TO THE AQUATIC ENVIRONMENT-CHRONIC HAZARD : Category 3

2.2 Label Elements

Labelling according to Regulation (EC) No. 1272/2008

The substance is classified and labelled according to the CLP Regulation.

Hazard Pictograms



Signal Word: DANGER

Hazard statements

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H360: Suspected of damaging fertility or the unborn child.

H351: Suspected of causing cancer.

H370: Causes damage to organs.

H372: Causes damage to organs through prolonged or repeated exposure.

H412: Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P270: Do not eat, drink or smoke when using this product.

P264: Wash thoroughly after handling.

P280: Wear protective gloves. Wear eye protection/face protection.

P272: Contaminated work clothing should not be allowed out of the workplace.

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P281: Use personal protective equipment as required.

P260: Do not breathe fume/mist/vapors/spray.

Response

P301 + P310: IF SWALLOWED: Call a POISON CENTER or doctor.

P330: Rinse mouth.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P362: Take off contaminated clothing and wash before use.

P305 + P351 + P338 + P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Immediately call doctor.

P308 + P313 + P362: If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before use.

P314: Get medical advice/attention if you feel unwell.

Storage

P405: Store locked up.

Disposal

P501: Dispose of contents/container to follow the regional regulation.

3 COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE OR MIXTURE: Mixture

3.1 Chemical Composition

Ingredients	CAS	EINECS	Proportion	Hazard Codes*
	Number	Number		
Potassium Hydroxide	1310-58-3	215-181-3	10% - 20%	H302, H314
Hydrazine Hydrate	7803-57-8	206-114-9	10% - 15%	H302, H311,
				H314, H317,
				H331, H350, H410
Other ingredients				
that do not	-	-	50% - 80%	-
contribute to the				
classification of the				
product				

*See section 16 for the full text of the Hazard Codes declared above.

Occupational Exposure Limits, if available, are listed in section 8.

4 FIRST-AID MEASURES

A INHALATION

May cause severe irritation of the respiratory tract. Remove from exposed area immediately to fresh air. Keep warm and at rest. Take care for medical treatment.

B SKIN CONTACT

May cause burns. Wash the affected area with plenty of water Take off immediately contaminated clothing. Wash it with plenty of water. If burns occur, cover affected area securely with sterile, dry, loose- fitting dressing. Get medical attention.

C EYE CONTACT

May cause severe corneal or conjunctival ulceration, possibly resulting in blindness.

Wash eyes immediately with large amount of water for more than 15 minutes. Get medical attention immediately.

D INGESTION

May cause severe irritation and injury to the mouth and throat, distention of the esophagus and stomach, and internal bleeding. Give large amount of water or milk immediately. Do not induce vomiting. Get medical attention immediately.

5 FIRE-FIGHTING MEASURES

Keep away from the source of fire or cool containers with water in case of difficult transportation.

6 ACCIDENTAL RELEASE MEASURES

Wear protective clothing. Stop leak. For small liquid spills, flush area with flooding amount of water. For large spills, stop the flow with dike, etc. without making liquid flow into sewer. Thoroughly rinse affected ground with plenty of water.

7 HANDLING AND STORAGE

Operate with filter respirator, chemical safety goggles, working clothes with long sleeve and rubber globes to avoid inhalation, eye and skin contact. Do not use empty containers for drinking water supply, etc.

Store product in tightly closed containers in the cool, dry and well-ventilated indoor Area. Store separating from acids, bases, oxidizers, reducers and flammables.

8 EXPOSURE CONTROLS/PERASONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMIT : Hydrazine

ACGIH (2009) PEL-TWA 0.013 mg/m3 0.01ppm PROTECTING EQUIPMENTS :Filter respirator, chemical safety goggles, working clothes with long sleeve and synthetic rubber globes.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Colorless to slightly yellowish liquid : More than $13.0 (20^{\circ}C)$ pН SPECIFIC GRAVITY: $1.23 \sim 1.29 (20^{\circ}\text{C})$ WATER SOLUBILITY: Miscible at any ratio FREEZING POINT : Less than -5° C FLASH POINT : None COD Mn : 3.3 % Total Nitrogen Total Phosphorus : 1.0 % 5.8~%

10 STABILITY AND REACTIVITY

STABILITY : Stable on normal usage and handling.

11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY : Oral rat LD50 : 550 mg/kg (Estimated value from components)
SKIN CORROSION/IRRITATION : Strong irritation when product contact skin.
EYE CORROSION/IRRITATION : May cause severe corneal or conjunctival ulceration, possibly resulting in blindness.

CARTINOGENICITY : Hydrazine : IARC Class 2B

12 ECOLOGICAL INFORMATION

FISH TOXICITY : L C 50 : Killifish (24hrs) : 41 mg/l

13 DISPOSAL CONDITIONS

PRODUCT : Never draw chemical directly to waste water line.

Request treatment to licensed waste-treatment company as "Special controlled industrial waste (Waste alkaline)".

PACKAGE : Empty used containers completely, dispose containers.

14 TRANSPORT INFORMATION

14.1 PROPER SHIPPING NAME: CORROSIVE LIQUID, TOXIC N.O.S. (Potassium Hydroxide, Hydrazine)

IMDG packing group: II

UN number	2922	
ADR		8 (Corrosive)
RID		8 (Corrosive)
Subsidiary Risk Label: 6.1 (Toxic)		

14.3 SEA TRANSPORT

UN number: 2922 IMDG class: 8 (Corrosive) Subsidiary Risk Label: 6.1 (Toxic)

14.4 AIR TRANSPORT

UN number: 2922 IATA/ICAO class: 8 Packing group: II Subsidiary Risk Label: 6.1 (Toxic)

14.5 Transport information (as appeared on the label)

1. UN Number:	2922				
2. Proper Shipping Name:	CORROSIVE	LIQUID,	TOXIC	N.O.S.	
(Potassium Hydroxide, Hydrazine)					
3. Packing Group:	PG II				
4. Label / Class:	8 (CORROSIV	E)			
5. Subsidiary Risk Label:	6.1 (TOXIC)				
6. Marine Pollutant:	NO				

15 REGULATORY INFORMATION

The poisonous and deleterious substances control act: Applicable Potassium hydroxide: Deleterious substance Act on the Prohibition of Chemical Weapons and the Regulation of Specific

Chemicals : Not Applicable Export trade control order : Not Applicable Industrial safety and health act : Applicable Hydrazine: Chemical substance proved to cause mutagenic effects. Hydrazine hydrate: Article 28-3 Direction of prevention from health hazardous substances. Potassium hydroxide, Hydrazine hydrate: Article 57-2 Substance which MSDS should be informed. Fire and disaster management act: Not Applicable Ship safety act: Applicable Toxic and corrosive substance Civil aeronautic act : Applicable Toxic and corrosive substance Act on port regulation: Applicable Toxic and corrosive substance PRTR law¹: Applicable Hydrazine: Class 1 No.333 CAS No. 302-01-2 6.7%¹ Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof. KASHIN HOW (METI Law)² : Applicable Hydrazine : Chemical substance under hazardous assessment survey :No.2 ² Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture. etc. *According to the law regulated in Japan.

16 OTHER INFORMATION

Full text of Hazard Statements referred in Section 3.

- H302: Harmful if swallowed.
- H314: Causes severe skin burns and eye damage.
- H317: May cause an allergic skin reaction.

H360: May damage fertility or the unborn child.

- H351: Suspected of causing cancer.
- H370: Causes damage to organs.

H372: Causes damage to organs through prolonged or repeated exposure.

H412: Harmful to aquatic life with long lasting effects.

H311: Toxic in contact with skin.

H331: Toxic if inhaled.

H350: May cause cancer.

H410: Very toxic to aquatic life with long lasting effects.

*The information herein may be revised by the newest knowledge.

*The information herein be only translated from MSDS written in Japanese language and nothing should be assured.

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