

SECTION 1: Identification

1.1. GHS Product identifier

Product form	: Substance
Trade name	: ETİBOR-48 (Borax Pentahydrate)
Chemical name	: Borax pentahydrate, disodium tetraborate pentahydrate, sodium tetraborate pentahydrate
IUPAC name	: disodium tetraborate, anhydrous
Substance type	: Mono-constituent
EC-No.	: 215-540-4
EC Index-No.	: 005-011-02-9
CAS-No.	: 12179-04-03
Formula	: Na ₂ B ₄ O ₇ ·5H ₂ O
Product group	: Trade product

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended uses and restrictions	: Not restricted
Recommended use	: Ceramic Detergent Borosilicate glass Fiberglass

1.4. Supplier's details

Supplier	Importer
ETİ MADEN İŞLETMELERİ GENEL MÜDÜRLÜĞÜ Kızılırmak Mahallesi 1443. Cadde No:5 Çukurambar-Çankaya Zipcode: 06530 Ankara – TÜRKİYE Tel: +90 312 294 20 00 – Fax: +90 312 230 71 84 info@etimaden.gov.tr www.etimaden.gov.tr	ETIMINE USA, INC. 411 Hackensack Ave Suite 902 Hackensack, NJ 07601 USA Tel: +1 (201) 462-1200; Fax: +1 (201) 462-1500 etimineusa@etimineusa.com www.etimineusa.com

1.5. Emergency phone number

CHEMTREC 1-800-262-8200/ (703) 741-5500

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Acute toxicity (oral), Category 5	H303
Serious eye damage/eye irritation, Category 2A	H319
Reproductive toxicity, Category 2	H361d

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects : Suspected of damaging the unborn child, Harmful in contact with skin, Harmful if swallowed, Causes serious eye irritation, Harmful to aquatic life

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN) :



Signal word (GHS UN)	: Warning
Hazard statements (GHS UN)	: H303 - May be harmful if swallowed H319 - Causes serious eye irritation H361d - Suspected of damaging the unborn child

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Precautionary statements (GHS UN) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P264 - Wash ... thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....
P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor/ ... if you feel unwell.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P405 - Store locked up.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent
IUPAC name : disodium tetraborate, anhydrous
Chemical name : disodium tetraborate, anhydrous; boric acid, disodium salt
Substance identification codes: See section 1.1

Name	Product identifier	%	Classification according to the United Nations GHS
Disodium tetraborate pentahydrate (Main constituent)	(CAS-No.) 12179-04-03	>99.9	Acute Tox. 5 (Oral), H303 Eye Irrit. 2A, H319 Repr. 2, H361

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after eye contact : Eye irritation.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

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6.3. Methods and materials for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing.
Hygiene measures	: Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.
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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ETIBOR-48 (Borax Pentahydrate) (12179-04-03)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	316.4 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	6.7 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	0.79 mg/kg bodyweight/day
Long-term - systemic effects, oral	0.79 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3.4 mg/m ³
Long-term - systemic effects, dermal	159.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	2.9 mg/l
PNEC aqua (marine water)	2.9 mg/l
PNEC aqua (intermittent, freshwater)	13.7 mg/l
PNEC (Soil)	
PNEC soil	5.7 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection	: Protective gloves
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: [In case of inadequate ventilation] wear respiratory protection.
Personal protective equipment symbol(s)	



8.4. Exposure limit values for the other components

No additional information available

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SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Molecular mass	: 291.35 g/mol
Colour	: white.
Odour	: odourless.
Odour threshold	: Not available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 741 °C
Freezing point	: Not applicable
Boiling point	: 1575 °C
Flammability (solid, gas)	: Not applicable
Explosive limits	: Not applicable
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable
Flash point	: Non flammable
Auto-ignition temperature	: N.A.
Decomposition temperature	: N.A.
pH	: 9.2 @20 C
pH solution	: 1 %
Viscosity, kinematic (calculated value) (40 °C)	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Negligible @20 C
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: 1.81 @20 C
Relative vapour density at 20 °C	: No data available
Solubility	: Water: ≥ 3.72 % @ 20 C; 51.20 % @100 C
Viscosity, dynamic	: No data available
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle specific surface area	: Not available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : May be harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

ETIBOR-48 (Borax Pentahydrate) (12179-04-03)

LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:FIFRA (40 CFR 163)
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Skin corrosion/irritation : Not classified

pH: 9.2 @20 C

Serious eye damage/irritation : Causes serious eye irritation.

pH: 9.2 @20 C

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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Viscosity, kinematic	No data available
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

ETIBOR-48 (Borax Pentahydrate) (12179-04-03)

LC50 - Fish [1]	74 mg/l Test organisms (species): Limanda limanda
LC50 - Fish [2]	79.7 mg/l Test organisms (species): Pimephales promelas
EC50 72h - Algae [1]	66 mg/l Test organisms (species): Phaeodactylum tricornutum
EC50 72h - Algae [2]	54 mg/l Test organisms (species): Phaeodactylum tricornutum
NOEC chronic fish	6.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'

12.2. Persistence and degradability

ETIBOR-48 (Borax Pentahydrate) (12179-04-03)

Persistence and degradability	Boron is naturally occurring and ubiquitous in the environment. Disodium tetraborate pentahydrate decomposes in the environment to natural borate.
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12.3. Bioaccumulative potential

ETIBOR-48 (Borax Pentahydrate) (12179-04-03)

Partition coefficient n-octanol/water (Log Kow)	No data available
Bioaccumulative potential	Not bioaccumulative.

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12.4. Mobility in soil

ETIBOR-48 (Borax Pentahydrate) (12179-04-03)

Mobility in soil : This product is soluble in water and is leachable through normal soil.

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG

UN RTDG	IMDG	IATA
14.1. UN number		
Not regulated for transport		
14.2. UN Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

- **UN RTDG**
No data available
- **IMDG**
No data available
- **IATA**
No data available

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Regulatory reference : Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on ELINCS (European List of Notified Chemical Substances).

SECTION 16: Other information

Issue date : 03/01/2007
Revision date : 03/08/2021

Section	Changed item	Change	Comments
		Added	This SDS was updated in accordance with

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			the GHS (Rev.6) (2015)-Guidance on the Compilation of Safety data Sheets. This SDS was updated in line with "Eti Maden Corporate Identity". (January,2016 / Rev. No: 05)
		Added	This SDS was updated in line with "Standardization and Simplification of Bag Printings".(January, 2018/ Rev.No: 06)
		Added	This SDS was updated to include K-REACH Registration number.(February,2019 Rev. No: 06.1)

Data sources

: Annex VI.

Abbreviations and acronyms

: CAS-No. - Chemical Abstract Service number

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

BLV - Biological limit value

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

DMEL - Derived Minimal Effect level

DNEL - Derived-No Effect Level

EC50 - Median effective concentration

EC-No. - European Community number

ED - Endocrine disrupting properties

EN - European Standard

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

IOELV - Indicative Occupational Exposure Limit Value

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level

N.O.S. - Not Otherwise Specified

NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level

NOEC - No-Observed Effect Concentration

OECD - Organisation for Economic Co-operation and Development

OEL - Occupational Exposure Limit

PBT - Persistent Bioaccumulative Toxic

PNEC - Predicted No-Effect Concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

SDS - Safety Data Sheet

WGK - Water Hazard Class

vPvB - Very Persistent and Very Bioaccumulative

Training advice

: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information

: **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H-statements & Precautionary statements (GHS UN):	
H303	May be harmful if swallowed
H319	Causes serious eye irritation
H361	Suspected of damaging fertility or the unborn child
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.

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P264	Wash ... thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/... if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P405	Store locked up.

SDS UN - ETİ Maden

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.