

**Helios Brillant****Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE  
COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : Helios Brillant

Product code : 103628E

Use of the  
Substance/Mixture : Metal Cleaner

Substance type: : Mixture

**For professional users only.**

Product dilution information : No dilution information provided.

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

Identified uses : Stainless steel care. Manual process

Recommended restrictions  
on use : Reserved for industrial and professional use.**1.3 Details of the supplier of the safety data sheet**Company : Ecolab Temizleme Sistemleri Ltd. Şti  
Esentepe Mahallesi, Cevizli - Esentepe E-5 Yanyol Caddesi  
Vizyon Bulvarı No: 13, Kat 1 No: 65 Turkey TR 34870 KARTAL /  
İSTANBUL  
+90 (216) 458 69 00, Fax: +90 (216) 458 69 07Company : Ecolab Gulf FZE  
P.O. Box 17063  
Jebel Ali Free Zone Area, Near Container Terminal 3 - North  
Zone, Dubai UAE 00971 4 8014444 Customer ServicesNalco Egypt Trading  
5th Settlement, South 90th St.  
The Address Building No 67th – 1st floor, New Cairo, Cairo, Egypt  
11835  
0020 2 25 37 1195Ecolab Maroc S.A.R.L.  
Centre Green Works Batiment B, Bureau N° 13 ,  
109 Route de Bouskoura, Sidi Maarouf, 27182, Casablanca,  
Morocco 00212 22 58 25 30 - 35Company : Ecolab Food Safety & Hygiene Solutions Pvt. Ltd  
WeWork, 247 Park Bus Stop, 13th floor, 247 Park, Hindustan C,  
LBS Road, Gandhi Nagar, Vikhroli West,

## Helios Brillant

Mumbai, Maharashtra. 400 079, India Phone: +91 22 48808555,  
+91 22 48808535 Toll free number: 1800 209 2530

### 1.4 Emergency telephone number

Emergency telephone number : +32-(0)3-575-5555 Trans- European

Poison Information Centre telephone number : 114 Ulusal Zehir Danışma Merkezi (UZEM)

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## Section: 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### Classification (T.R. SEA No 28848)

Eye irritation, Category 2

H319

### 2.2 Label elements

#### Labelling (T.R. SEA No 28848)

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H319 Causes serious eye irritation.

Precautionary Statements : **Prevention:**  
P280e Wear eye protection/face protection.

### 2.3 Other hazards

Do not mix with bleach or other chlorinated products – will cause chlorine gas.

## Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous components

Chemical Name	CAS-No. EC-No.	Classification (T.R. SEA No 28848)	Concentration : [%]
alcohols, c12-14, ethoxylated	68439-50-9 500-213-3	Acute aquatic toxicity Category 1; H400 Serious eye damage/eye irritation	>= 3 - < 10

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		Category 1; H318 Skin corrosion/irritation Category 2; H315  M = 1	
ethanol	64-17-5 200-578-6	Flammable liquids Category 2; H225 Serious eye damage/eye irritation Category 2; H319  Serious eye damage/eye irritation Category 2 50 - 100 %	>= 1 - < 10
citric acid, monohydrate	5949-29-1 201-069-1	Eye irritation Category 2; H319	>= 1 - < 10
Substances with a workplace exposure limit :			
aluminium oxide	1344-28-1 215-691-6	Not Classified;	>= 30 - < 50

For the full text of the H-Statements mentioned in this Section, see Section 16.

### Section: 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Get medical attention if symptoms occur.

#### 4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

#### 4.3 Indication of immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

### Section: 5. FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.

#### 5.2 Special hazards arising from the substance or mixture

- Specific hazards during : Fire Hazard

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- firefighting : Keep away from heat and sources of ignition.  
Flash back possible over considerable distance.  
Beware of vapours accumulating to form explosive concentrations.  
Vapours can accumulate in low areas.
- Hazardous combustion products : Depending on combustion properties, decomposition products may include following materials:  
Carbon oxides  
metal oxides

**5.3 Advice for firefighters**

- Special protective equipment for firefighters : Use personal protective equipment.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

**Section: 6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

- Advice for non-emergency personnel : Remove all sources of ignition. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Advice for emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

**6.2 Environmental precautions**

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

**6.3 Methods and materials for containment and cleaning up**

- Methods for cleaning up : Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

**6.4 Reference to other sections**

See Section 1 for emergency contact information.  
For personal protection see section 8.  
See Section 13 for additional waste treatment information.

**Section: 7. HANDLING AND STORAGE**

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### 7.1 Precautions for safe handling

- Advice on safe handling : Avoid contact with skin and eyes. Use only with adequate ventilation. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep away from heat and sources of ignition. Protect from frost, heat and sunlight. Store at room temperature in the original container. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
- Storage temperature : 0 °C to 40 °C

### 7.3 Specific end uses

- Specific use(s) : Stainless steel care. Manual process

## Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
aluminium oxide	1344-28-1	ZOAD/TWA (Total dust.)	15 mg/m3	TR OEL DU
Further information		Allowable occupational exposure limit values of chemicals in dust form		
		ZOAD/TWA (Respirable dust)	5 mg/m3	TR OEL DU
Further information		Allowable occupational exposure limit values of chemicals in dust form		
ethanol	64-17-5	TWA (8 Hour)	1,000 ppm 1,900 mg/m3	TR OEL
ethanol	64-17-5	TWA	1,000 ppm 1,900 mg/m3	IN OEL

### 8.2 Exposure controls

#### Appropriate engineering controls

- Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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### Individual protection measures

- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.
- Eye/face protection (EN 166) : Safety glasses with side-shields
- Hand protection (EN 374) : No special protective equipment required.
- Skin and body protection (EN 14605) : No special protective equipment required.
- Respiratory protection (EN 143, 14387) : None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

### Environmental exposure controls

- General advice : Consider the provision of containment around storage vessels.

## Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : white
- Odour : Perfumes, fragrances
- pH : 2.9 - 3.7, 100 %
- Flash point : 57 °C, Does not sustain combustion.
- Odour Threshold : Not applicable and/or not determined for the mixture
- Melting point/freezing point : Not applicable and/or not determined for the mixture
- Initial boiling point and boiling range : Not applicable and/or not determined for the mixture
- Evaporation rate : Not applicable and/or not determined for the mixture
- Flammability (solid, gas) : Not applicable and/or not determined for the mixture
- Upper explosion limit : Not applicable and/or not determined for the mixture
- Lower explosion limit : Not applicable and/or not determined for the mixture
- Vapour pressure : Not applicable and/or not determined for the mixture
- Relative vapour density : Not applicable and/or not determined for the mixture
- Relative density : 1.28 - 1.33
- Water solubility : soluble

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Solubility in other solvents	: Not applicable and/or not determined for the mixture
Partition coefficient: n-octanol/water	: Not applicable and/or not determined for the mixture
Auto-ignition temperature	: Not applicable and/or not determined for the mixture
Thermal decomposition	: Not applicable and/or not determined for the mixture
Viscosity, kinematic	: 2072.690 mm <sup>2</sup> /s (40 °C)
Explosive properties	: Not applicable and/or not determined for the mixture
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

### 9.2 Other information

Not applicable and/or not determined for the mixture

## Section: 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Do not mix with bleach or other chlorinated products – will cause chlorine gas.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

None known.

### 10.6 Hazardous decomposition products

In the event of fire, see Section 5

## Section: 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

**Product**

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Acute oral toxicity	: There is no data available for this product.
Acute inhalation toxicity	: There is no data available for this product.
Acute dermal toxicity	: There is no data available for this product.
Skin corrosion/irritation	: There is no data available for this product.
Serious eye damage/eye irritation	: Mild eye irritation
Respiratory or skin sensitization	: There is no data available for this product.
Carcinogenicity	: There is no data available for this product.
Reproductive effects	: There is no data available for this product.
Germ cell mutagenicity	: There is no data available for this product.
Teratogenicity	: There is no data available for this product.
STOT - single exposure	: There is no data available for this product.
STOT - repeated exposure	: There is no data available for this product.
Aspiration toxicity	: There is no data available for this product.

### Components

Acute oral toxicity	: ethanol LD50 rat: 10,470 mg/kg citric acid, monohydrate LD50 rat: 11,700 mg/kg aluminium oxide LD50 rat: > 10,000 mg/kg
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### Components

Acute inhalation toxicity	: ethanol 4 h LC50 rat: 117 mg/l Test atmosphere: vapour
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### Components

Acute dermal toxicity	: alcohols, c12-14, ethoxylated LD50 : > 2,000 mg/kg ethanol LD50 rabbit: 15,800 mg/kg citric acid, monohydrate LD50 rat: > 2,000 mg/kg
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### Potential Health Effects

Eyes	: Causes serious eye irritation.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.



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Inhalation : Health injuries are not known or expected under normal use.  
Chronic Exposure : Health injuries are not known or expected under normal use.

### Experience with human exposure

Eye contact : Redness, Pain, Irritation  
Skin contact : No symptoms known or expected.  
Ingestion : No symptoms known or expected.  
Inhalation : No symptoms known or expected.

## Section: 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Environmental Effects : Toxic to aquatic life.

#### Product

Toxicity to fish : no data available  
Toxicity to daphnia and other aquatic invertebrates : no data available  
Toxicity to algae : no data available

#### Components

Toxicity to fish : ethanol96 h LC50 Pimephales promelas (fathead minnow): > 100 mg/l  
citric acid, monohydrate96 h LC50 Fish: > 100 mg/l

#### Components

Toxicity to daphnia and other aquatic invertebrates : ethanol48 h EC50 Aquatic Invertebrate: 857 mg/l

#### Components

Toxicity to algae : alcohols, c12-14, ethoxylated72 h EC50: 0.8 mg/l

### 12.2 Persistence and degradability

#### Product

Biodegradability : The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC

#### Components

Biodegradability : alcohols, c12-14, ethoxylatedResult: Readily biodegradable.  
ethanolResult: Readily biodegradable.

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citric acid, monohydrate Result: Readily biodegradable.

aluminium oxide Result: Not applicable - inorganic

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

#### Product

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

no data available

## Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

### 13.1 Waste treatment methods

- |                                   |   |
|-----------------------------------|---|
| Product                           | : Do not contaminate storm water drains, natural waterways or soil with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of contents/container in accordance with local regulations. Dispose of wastes in an approved waste disposal facility.   |
| Contaminated packaging            | : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.   |
| Guidance for Waste Code selection | : Organic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC) and local regulations. |

## Section: 14. TRANSPORT INFORMATION

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The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

### Land transport (ADR/ADN/RID)

14.1 UN number	: Not dangerous goods
14.2 UN proper shipping name	: Not dangerous goods
14.3 Transport hazard class(es)	: Not dangerous goods
14.4 Packing group	: Not dangerous goods
14.5 Environmental hazards	: Not dangerous goods
14.6 Special precautions for user	: Not dangerous goods

### Air transport (IATA)

14.1 UN number	: Not dangerous goods
14.2 UN proper shipping name	: Not dangerous goods
14.3 Transport hazard class(es)	: Not dangerous goods
14.4 Packing group	: Not dangerous goods
14.5 Environmental hazards	: Not dangerous goods
14.6 Special precautions for user	: Not dangerous goods

### Sea transport (IMDG/IMO)

14.1 UN number	: Not dangerous goods
14.2 UN proper shipping name	: Not dangerous goods
14.3 Transport hazard class(es)	: Not dangerous goods
14.4 Packing group	: Not dangerous goods
14.5 Environmental hazards	: Not dangerous goods
14.6 Special precautions for user	: Not dangerous goods
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	: Not dangerous goods

## Section: 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

according to Detergents Regulation EC 648/2004	: less than 5 %: Non-ionic surfactants Other constituents: Perfumes Allergens: Limonene Hexyl cinnamal Amyl cinnamal
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Seveso III: Directive : FLAMMABLE LIQUIDS P5c  
2012/18/EU of the European Lower tier : 5,000 t  
Parliament and of the Council Upper tier : 50,000 t  
on the control of major-  
accident hazards involving  
dangerous substances.

**National Regulations**

**Take note of Dir 94/33/EC on the protection of young people at work.**

Other regulations : According to 11 December 2013, Numbered 28848 (Bis), "Ministry of Environment and Forestry"; Regulation on Classification, Labelling and Packaging of Substances and Mixtures. Prepared according to Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals. (23.06.2017 - No: 30105)

**15.2 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out on the product.

**Section: 16. OTHER INFORMATION**

**Procedure used to derive the classification according to REGULATION (EC) No 1272/2008 and Regulation T.R. SEA No 28848**

Classification	Justification
Eye irritation 2, H319	Based on product data or assessment

**Full text of H-Statements**

H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H400 Very toxic to aquatic life.

**Full text of other abbreviations**

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; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -

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International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECL - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this 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.