

SAFETY DATA SHEET

Issuing Date 01-Apr-2015

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Revision Number 0

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) NBS
Product Name Combi-Clean
Synonyms NBS

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

Recommended Use Institutional dish machine detergent
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company
Envirochem, Inc.
425 Whitehead Ave.
South River, NJ 08882
TEL: 732-238-6700

For further information, please contact

E-mail Address mail@thewerco.com

1.4. Emergency telephone number

Emergency Telephone Number No information available.

Europe	112
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Section 2. Hazards identification

2.1. - Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

Physical Hazards

None

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s) Not dangerous
For the full text of the R-phrases mentioned in this Section, see Section 16

2.2. Label Elements



Signal Word**Warning****Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

EUH210 - Safety data sheet available on request

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves/ eye protection/ face protection

P337 + P313 - If eye irritation persists: Get medical advice/ attention

Precautionary Statements

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

P321 - Specific treatment (see supplemental first aid instructions on this label)

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

P362 - Take off contaminated clothing and wash before reuse

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/ attention

2.3. Other information

No information available.

Section 3. Composition/information on ingredients**3.1. Substances**

Chemical Name	EC-No	CAS-No	Weight %	Classification	EU - GHS Substance Classification	REACH No.
Ethanolamine	205-483-3	141-43-5	2	Xn; R20/21/22 C; R34	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Corr. 1B (H314) Acute Tox. 4 (H332)	No data available
Diethylene glycol monobutyl ether	203-961-6	112-34-5	2	Xi; R36	Eye Irrit. 2 (H319)	No data available

For the full text of the R-phrases mentioned in this Section, see Section 16**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****Eye Contact**

IF IN EYES: 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.

Skin Contact

Wash skin with soap and water. If skin irritation occurs: Get medical advice/ attention Take off contaminated clothing and wash before reuse.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell

Inhalation If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

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

Most Important Symptoms/Effects Red eyes. Tearing. Irritation.

4.3. Indication of immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

None.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

None in particular.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological Information.

6.3. Methods and materials for containment and cleaning up

Dike far ahead of liquid spill for later disposal.

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use personal protective equipment. Sweep up and shovel into suitable containers for disposal.

6.4. Reference to other sections

See Section 12 for additional information.

Section 7. Handling and storage

7.1. Precautions for Safe Handling

Handling

Wear protective gloves/ eye protection/ face protection Wash thoroughly after handling. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

Hygiene Measures

Provide regular cleaning of equipment, work area and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

7.3. Specific end use(s)**Exposure Scenario**

No information available.

Other Guidelines

No information available.

Section 8. Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

Chemical Name	EU	The United Kingdom	France	Spain	Germany
Ethanolamine 141-43-5	TWA 1 ppm TWA 2.5 mg/m ³ S* STEL 3 ppm STEL 7.6 mg/m ³	STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³ Skin	VME: 2.5 mg/m ³ VME: 1 ppm VLCT: 3 ppm VLCT: 7.6 mg/m ³	S* VLA-EC: 6 ppm VLA-EC; 15 mg/m ³ VLA-EC VLA-ED: 3 ppm VLA-ED; 7.5 mg/m ³ VLA-ED	MAK: 2 ppm MAK: 5.1 mg/m ³ Ceiling / Peak: 10.2 mg/m ³ Ceiling / Peak: 4 ppm TWA: 2 ppm TWA: 5.1 mg/m ³
Diethylene glycol monobutyl ether 112-34-5	TWA 10 ppm TWA 67.5 mg/m ³ STEL 15 ppm STEL 101.2 mg/m ³	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	TWA: 10 ppm TWA: 67 mg/m ³ Ceiling / Peak: 15 ppm Ceiling / Peak: 100.5 mg/m ³
Component	Italy	Portugal	The Netherlands	Finland	Denmark
Ethanolamine 141-43-5 (2)	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Skin	STEL: 6 ppm TWA: 3 ppm	Skin STEL: 3 ppm STEL; 7.6 mg/m ³ STEL MAC: 1 ppm MAC; 2.5 mg/m ³ MAC	TWA: 2.5 mg/m ³ TWA: 1 ppm STEL: 3 ppm STEL: 7.6 mg/m ³ Skin	TWA: 1 ppm TWA: 2.5 mg/m ³ Skin
Diethylene glycol monobutyl ether 112-34-5 (2)	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³		Skin STEL: 100 mg/m ³ TWA: 50 mg/m ³	TWA: 10 ppm TWA: 68 mg/m ³	TWA: 10 ppm TWA: 68 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Ethanolamine 141-43-5	Skin STEL 4 ppm STEL; 10 mg/m ³ STEL MAK: 1 ppm MAK; 2.5 mg/m ³ MAK	STEL: 4 ppm STEL; 10 mg/m ³ STEL MAK: 2 ppm MAK; 5 mg/m ³ MAK	NDSch: 7.5 mg/m ³ NDS: 2.5 mg/m ³ Skin	TWA: 3 ppm TWA: 8 mg/m ³ STEL: 16 mg/m ³ STEL: 6 ppm	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Skin
Diethylene glycol monobutyl ether 112-34-5	STEL 15 ppm STEL 101.2 mg/m ³ TWA: 10 ppm TWA: 67.5 mg/m ³	STEL: 15 ppm STEL: 101.2 mg/m ³ TWA: 10 ppm TWA: 67 mg/m ³	STEL: 100 mg/m ³ TWA: 67 mg/m ³	TWA: 10 ppm TWA: 68 mg/m ³ STEL: 20 ppm STEL: 102 mg/m ³	TWA: 10 ppm TWA: 67.5 mg/m ³ STEL: 15 ppm STEL: 101.2 mg/m ³

Derived No Effect Level No information available**Predicted No Effect Concentration (PNEC)** No information available.**8.2. Exposure controls****Engineering Measures**

Showers. Eyewash stations.

Personal protective equipment**Eye Protection**

Tightly fitting safety goggles.

Skin and Body Protection

Long sleeved clothing.

Hand Protection	Protective gloves.
Respiratory Protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental Exposure Controls No information available.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid	Appearance	Clear
Odor	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	11.4	None known
Melting Point/Range	No data available	None known
Boiling Point/Boiling Range	> 100 °C	None known
Flash Point	Not applicable.	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Relative Density	No data available	None known
Water Solubility	100	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other information

VOC Content (%)	No information available
Flammability Limits in Air	No data available

Section 10. Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

None known based on information supplied.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

Section 11. Toxicological information

11.1.**Acute Toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation

There is no data available for this product.

Eye Contact

Causes serious eye irritation.

Skin Contact

Causes skin irritation.

Ingestion

There is no data available for this product.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diethylene glycol monobutyl ether	= 3384 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	
Ethanolamine	= 1720 mg/kg (Rat)	= 1 mL/kg (Rabbit) = 1025 mg/kg (Rabbit)	-

Sensitization

No information available.

Mutagenic Effects

No information available.

Carcinogenic Effects

No information available.

Reproductive Toxicity

No information available.

Developmental Toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Target Organ Effects

Eyes. Skin.

Aspiration Hazard

No information available.

Section 12. Ecological information**12.1. Toxicity****Ecotoxicity Effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethanolamine	EC50 72 h: = 15 mg/L (Desmodesmus subspicatus)	LC50: 227 mg/L Pimephales promelas 96 h flow-through LC50: 3684 mg/L Brachydanio rerio 96 h static LC50: 300-1000 mg/L Lepomis macrochirus 96 h static LC50: 114-196 mg/L Oncorhynchus mykiss 96 h static LC50: >200 mg/L Oncorhynchus mykiss 96 h flow-through	EC50 = 110 mg/L 17 h EC50 = 12200 mg/L 2 h EC50 = 13.7 mg/L 30 min	EC50 48 h: = 65 mg/L (Daphnia magna)
Diethylene glycol monobutyl ether	EC50 96 h: > 100 mg/L (Desmodesmus subspicatus)	LC50 96 h: = 1300 mg/L static (Lepomis macrochirus)		EC50 24 h: = 2850 mg/L (Daphnia magna) EC50 48 h: > 100 mg/L (Daphnia magna)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential.

No information available.

Chemical Name	Log Pow
Ethanolamine	-1.91

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

This product does not contain any known or suspected endocrine disruptors.

Section 13. Disposal considerations

13.1. Waste treatment methods

Waste from Residues / Unused Products	Dispose of in accordance with the European Directives on waste and hazardous waste.
Contaminated Packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
Other Information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Section 14. Transport information

IMDG/IMO

14.1. UN-Number	Not regulated.
14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Marine Pollutant	None.
14.6. Special Provisions	None.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available.

RID

14.1. UN-Number	Not regulated.
14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

ADR

14.1. UN-Number	Not regulated.
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14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

ICAO

14.1. UN-Number	Not regulated.
14.2. Proper shipping name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

IATA

14.1. UN-Number	Not regulated.
14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

Section 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**International Inventories**

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Not determined
IECSC	Complies
AICS	Complies
KECL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No information available

Section 16. Other information

Full text of R-phrases referred to under Sections 2 and 3

R36 - Irritating to eyes

R34 - Causes burns

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H314 - Causes severe skin burns and eye damage

H332 - Harmful if inhaled

Key literature references and sources for data

www.ChemADVISOR.com/

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Revision Note Initial Release.

This safety data sheet complies with the requirements of Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No. 1907/2006

General Disclaimer

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End of Safety Data Sheet