

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product Form : Mixture
Product Name : C-Clean Bio
Product Code : N/A
Type of Product : Cleaning Chemical
Product Group : Cleaning Product

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

1.2.1. Relevant identified Uses

Main use category : Professional Use
Industrial/Professional use spec : For professional use only

1.2.2. Use advised against

No additional information is available

1.3. Details of the supplier of the safety data sheet

PATSA Pakistan (Pvt.) Ltd.
Steel House, West Wharf Road,
Karachi, 74000, Pakistan
T: +92 0330 8694794
info@patsaonline.net www.patsaonline.net

1.4. Emergency telephone number

Country	Organization/Company	Address	Emergency Number	Comment
N/A	N/A	N/A	N/A	N/A

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]Mixture: SDS < 2015: Show CLP information only

Flammable liquids, Category 3 H226
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 1 H318
Skin sensitization, Category 1 H317
Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment - Acute Hazard, Category 1 H400
Hazardous to the aquatic environment - Chronic Hazard, Category 1 H410

Adverse physicochemical, human health and environmental effects

No additional information is available.

For full text of H-phrases see section 16.

2.2. Label elements

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

Hazard pictograms (CLP) :



Single word (CLP) : Danger.
Hazard statements (CLP) : Fatty alcohol, C12-14, ethoxylated; D'limonene; Oleyamine ethoxylate.
: H226 - Flammable liquid and vapour.
: H304 - May be fatal if swallowed and enters airways.
: H315 - Causes skin irritation.
: H317 - May cause an allergic skin reaction.
: H318 - Causes serious eye damage.
: H410 - Very toxic to aquatic life with long lasting effects.
Precautionary Statements (CLP) : P280 - Wear protective gloves, protective clothing, eye protection, face shield.
: P302+P352 - IF ON SKIN: Wash with plenty of water, soap.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other Hazards

Other hazard not contributing to the Classification : None.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixture

Name	Product Identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-(2-butoxyethoxy)ethanol	CAS-No.) 112-34-5 (EC-No.) 203-961-6 (EC Index-No.) 603-096-00-8 (REACH-no) 01-2119475104-44	>30.0	Eye Irrit. 2, H319
D'Limonene	(CAS No.) 5989-27-5(EC-No.) 232-433-8 (REACH-no) 01-2119493353-35	>15-30	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Oleylamine ethoxylate	(CAS-No.) 26635-93-8 (EC-No.) 500-048-7	5-15	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400
Fatty alcohol, C12-14, ethoxylated	(CAS-No.) 68439-46-3 (EC-No.) Polymer	<5.0	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318

Full Text of H-statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Take to hospital.
First-aid measures after skin contact : Take off contaminated clothing. Rinse with plenty of water. Transport to hospital immediately.
First-aid measures after eye contact : First prolonged rinsing with water (contact lenses to be removed if this is easily done), then take to a doctor.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Transport to hospital immediately.

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

Symptoms/effects after inhalation : Unconsciousness. Dizziness. Headache. Nausea. Drowsiness.
Symptoms/effects after skin contact : Pungent. Severe burns. Pain. Redness.
Symptoms/effects after eye contact : Pungent. Pain. Redness. Blurred vision.
Symptoms/effects after ingestion : Caustic, lack of breath, vomiting, blisters on lips and tongue, burning pain in mouth and throat, gullet and stomach.

4.3. Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray, Powder, Foam, CO₂
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards as arising from the substance or mixture

Fire hazard : None.
Explosion hazard : None.

5.3. Advice for firefighters

Reactivity : No special precautions required.
Firefighting instructions : No specific firefighting instructions required..
Protection during firefighting : No specific measures are necessary.
Other information : None known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Isolate from fire, if possible, with unnecessary risk.

6.1.1. For non-emergency personnel

Non additional information is available.

6.1.2. For emergency responders

Non additional information is available.

6.2. Environmental precautions

Prevent entry to sewers and public.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers.
Methods for cleaning up : The material and its container must be disposed of in a safe way, and as per local legislation.
Other information : Absorb the product onto porous material.

6.4. Reference to other sections

See headings 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes. Handle and open the container with care. Keep away from sources of ignition- No smoking.
Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.
Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible products : Oxidizing agent, strong acids. Strong bases.
Incompatible materials : Sources of ignition. Heat sources.
Storage area : Meet the legal requirements. Store in a cool area. Store in a well-ventilated place.
Special rules on packaging : Meet the legal requirements.

SECTION 8: Exposure controls/ personal protection

8.1. Control parameters

C-Clean Bio		
	Limit value (mg/m ³)	Here is a summary list of the hazardous components mentioned in paragraph 3, of which the TLV value is known: 67.5 mg/m ³ 2-(2-butoxyethoxy)ethanol, diethylene glycol mono butyl ether

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information is available.

8.2.2 Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective coating.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Nitrile rubber gloves. Breakthrough time: > 480 Min, (EN 374). Layer thickness: 0,35 mm. Always wash your hands after handling the product

8.2.2.3. Respiratory protection

Respiratory protection:

Ensure adequate air ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Universal mask (ABEK)

8.2.2.4. Thermal hazards

No additional information is available.

8.2.3. Environmental exposure controls

No additional information is available.

SECTION 9: Physical and chemical properties

9.1. Information

Physical state	: Liquid.
Colour	: Yellow.
Odour	: Characteristic.
Odour threshold	: Not applicable.
pH	: /.
pH solution	: /.
Relative evaporation rate (butylacetate=1)	: 0.3
Melting point	: /.
Freezing point	: No data available.
Boiling point	: 100 - 233°C.
Flashpoint	: 45 °C
Auto-ignition temperature	: 200 °C
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: 190 Pa @ 20°C.
Relative vapour density at 20 °C	: No data available.
Relative density	: No data available.
Density	: 0.932 kg/l @ 20°C
Solubility	: Water insoluble. An emulsion is formed.
Partition coefficient n-octanol/water (Log Pow)	: No data available.
Viscosity, kinematic	: 1 mm ² /s @ 20°C.
Viscosity, dynamic	: 1 mPa·s @ 20°C.
Explosive properties	: Not applicable.
Oxidising properties	: Not applicable.
Lower explosive limit (LEL)	: 0.7 vol %.
Upper explosive limit (UEL)	: 24.6 vol %.

9.1. Information

Voce content	: 25%
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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at ambient temperature and under normal conditions of use.

10.2. Chemical stability

Extremely high or low temperatures.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

10.5. Incompatible materials

Bases. Acids. Oxidizing agents. Reducing Agents

10.6. Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effect

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Additional information	: See Heading 3 (information on ingredients)

C-Clean Bio

LD50 oral rat	/.
LD50 dermal rabbit	/.

D-Limonene (CAS No.) 5989-27-5

LD50 oral rat	4400 mg/kg body weight (Rat, Equivalent or similar to OCED 401; Experimental value)
LD50 dermal rabbit	>=5000 mg/kg body weight (Rabbit, Experimental value, Equivalent or similar to OCED 402)
LC50 inhalation rat (mg/l)	>=50 mg/l/4h (Rat, Experimental value)

2-(2-butoxyethoxy)ethanol (CAS No.) 112-34-5	
LD50 oral rat	Not classified
LD50 dermal rabbit	Not classified
LC50 inhalation rat (mg/l)	Not classified

Fatty alcohol, C12-14, ethoxylated (CAS No.) 68439-46-3	
LD50 oral rat	3305 mg/kg
LD50 dermal rabbit	>= 2764 mg/kg
LC50 inhalation rat (mg/l)	>= 50 mg/l/4h

Oleylamine ethoxylate (CAS No.) 26635-93-8	
LD50 oral rat	>=5000 mg/kg
LD50 dermal rabbit	>=5000 mg/kg

Skin corrosion/irritation	: Causes skin irritation. pH: /.
Serious eye damage/irritation	: Causes serious eye damage. pH: /.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters the airways.

C-Clean Bio	
Viscosity, kinematic	1 mm ² /s @ 20°C

SECTION 12: Ecological information

12.1. Toxicity

Ecology – general	: No data available.
Acute aquatic toxicity	: Very toxic to aquatic life.
Chronic aquatic toxicity	: Very toxic to aquatic life with long-lasting effects.

D-Limonene (CAS No.) 5989-27-5	
LC50 fish 1	>0.72 mg/l (96 h; Onorhynchus mykiss; Nominal concentration)
EC50 Daphnia 1	0.36 mg/l
EC50 72h algae (1)	8 - 150 mg/l
NOEC chronic crustacea	0.115 mg/l (16 days)
NOEC chronic algae	2.62 mg/l (72h)

Oleylamine ethoxylate (CAS No.) 26635-93-8	
LC50 fish 1	0.25 mg/l (96 hr, Oncorhynchus mykiss)
EC50 Daphnia 1	0.49 mg/l
ErC50 (algae)	0.11 - 1 mg/l

2-(2-butoxyethoxy)ethanol (CAS No.) 112-34-5	
LC50 fish 1	1300 mg/l
EC50 Daphnia 1	> 100 mg/l
ErC50 (algae)	> 100 mg/l

12.2. Persistence and degradability

C-Clean Bio	
Persistence and degradability	This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

C-Clean Bio	
Biocummulative potential	No supplementary information available.

12.4. Mobility in soil

Linear Alcohol Ethoxylate (CAS No.) 68439-50-9	
Mobility in soil	No supplementary information available.
Ecology - soil	No supplementary information available.

12.5. Results of PBT and vPvB assessment

No additional information available.

12.6. Other adverse effects

Additional information : No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Comply with local regulations for disposal.
Waste treatment methods : Dispose of at a licensed site.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

SECTION 14: Transport information

In accordance with ADR

14.1. UN number

UN-No. (ADR) : 1993

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Flammable liquid, n.o.s.
Transport document description (ADR) : UN 1993 Flammable liquid, n.o.s. (mixture with D Limonene), 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3



14.4. Packing Group

Packaging group (ADR) : III

14.5. Environmental hazards

Dangerous for the environment : Yes
Other information : Dangerous for the environment

14.6. Special precautions for user

Special transport precautions : Fire hazard, Danger of explosion, Heating may cause an explosion, This product contains hazardous components for the aquatic environment, Do not allow to enter drains or water courses.

- Overland transport

Hazard identification number (Kemler No.) : 30
Orange plates :



Tunnel restriction code (ADR) : D/E

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

VOC content : 25 %

15.1.1. National Regulations

No additional information available

No data available

SECTION 16: Other information**Full text of H- and EUH- statements:**

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitization, skin, Category 1
H226	Flammable liquid and vapour, Category 3
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters the airways, Category 1
H315	Causes skin irritation.
H317	May cause an allergic skin reaction, Category 1
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long-lasting effects, Category 1
R10	Flammable
R22	Harmful if swallowed
R36	Irritating to eyes
R38	Irritating to skin
R41	Risk of serious damage to eyes
R50	Very toxic to aquatic organisms
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

Safety Data Sheet (MSDS), EU

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.