Bacto Clean Gel 500ml

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

1.1. Product identifier

Trade name/designation:

Bacto Clean Gel 500ml

Article No.:
T464001

UFI:
GHSU-NK8M-2NJE-Q8GD

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

Use of the substance/mixture:
Hand disinfectant

1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids *(Flam. Liq. 2)*	H225: Highly flammable liquid and vapour.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

2.2. Label elements

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

Hazard pictograms:



GHS07
Exclamation mark



GHS02
Flame

Bacto Clean Gel 500ml

Signal word: Danger

Hazard statements for physical hazards	
H225	Highly flammable liquid and vapour.

Hazard statements for health hazards	
H319	Causes serious eye irritation.

Hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.

Supplemental hazard information: none

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.

Precautionary statements Response	
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.

Precautionary statements Disposal	
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

2.3. Other hazards

Other adverse effects:

Vapours can form explosive mixtures with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5 REACH No.: 01-2119457610-43	**ethanol** Eye Irrit. 2 (H319), Flam. Liq. 2 (H225)  Danger **Specific concentration limit (SCL)** Eye Irrit. 2; H319: 50% ≤ C < 100% **Acute Toxicity Estimate** ATE (oral) 10,470 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, vapour) > 20 mg/L	80 – 85 weight-%
CAS No.: 112-72-1 EC No.: 204-000-3 REACH No.: 01-2119485910-33	**tetradecanol** Aquatic Chronic 1 (H410), Eye Irrit. 2 (H319)  Warning	< 2.5 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Remove contaminated, saturated clothing immediately.
Get medical advice/attention if you feel unwell.

Following inhalation:

Remove person to fresh air and keep comfortable for breathing.
Consult a doctor if symptoms persist.

In case of skin contact:

Consult a doctor if skin irritation persists.

After eye contact:
Rinse immediately with plenty of water, also under the eyelid, for at least 15 minutes.
In case of eye irritation consult an ophthalmologist.

Following ingestion:
Rinse out mouth immediately and drink plenty of water.
Never give anything by mouth to an unconscious person!
Call a physician immediately.
If swallowed or vomited, danger of penetration into the lungs.

4.2. Most important symptoms and effects, both acute and delayed
Caution, danger of foam aspiration. Eye contact may cause irritation. Inhalation of high vapour concentrations may cause narcotic effects. May irritate mucous membranes.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
alcohol resistant foam, Dry extinguishing powder, Carbon dioxide (CO2), Water spray jet

Unsuitable extinguishing media:
Full water jet

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products:
Carbon monoxide, Carbon dioxide
Risk of formation of toxic pyrolysis products.

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus. Protective equipment.

5.4. Additional information
Vapours are heavier than air, spread along floors and form explosive mixtures with air.
Cool endangered containers with water spray.
Fire residues and contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Personal precautions:
Provide adequate ventilation. Keep away from sources of ignition - No smoking.
Avoid contact with skin, eyes and clothes.
Avoid breathing vapours.

6.1.2. For emergency responders
Personal protection equipment:
Use respiratory protection if vapours develop.
Use personal protection equipment.

6.2. Environmental precautions
Do not allow to enter drains/surface water/ground water.

6.3. Methods and material for containment and cleaning up
For containment:
Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up:
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Collect in closed and suitable containers for disposal.

6.4. Reference to other sections

See section 7 for further information on safe handling.
For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:
Use only in well-ventilated areas.
Use solvent-resistant equipment.
Avoid spilling or spraying in enclosed spaces.

Fire prevent measures:
Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharge.
Vapours are heavier than air, spread along floors and form explosive mixtures with air.

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7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:
Keep container tightly closed in a cool, well-ventilated place.
Protect from heat and direct sunlight.
Keep/Store only in original container.
To follow: Storage of hazardous substances in transportable containers (TRGS 510).

Hints on storage assembly:
Incompatible with: Oxidizing agent

Storage class (TRGS 510, Germany): 3 – Flammable liquids

Further information on storage conditions:
Keep away from food, drink and animal feed.

7.3. Specific end use(s)

Recommendation:
Hand disinfectant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**ethanol** CAS No.: 64-17-5 EC No.: 200-578-6	① 1,000 ppm (1,900 mg/m³)
MAK (AT)	**ethanol** CAS No.: 64-17-5 EC No.: 200-578-6	② 2,000 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate ventilation.

8.2.2. Personal protection equipment

Eye/face protection:
No eye protection required if used properly, otherwise safety goggles with side shields.

Skin protection:
Body protection:
Long-sleeved work clothing (DIN EN ISO 6530)

Respiratory protection:
Usually no personal respirative protection necessary.
In case of inadequate ventilation wear respiratory protection. (Gas filter type A, EN 14387).

Other protection measures:
General protective and hygienic measures:
Do not inhale vapours and spray mist.
Do not eat, drink or smoke when using this product.
Avoid contact with eyes.
Take off contaminated clothing and wash it before reuse.

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Form: Gel
Colour: colourless
Odour: Alcohol
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	7.5 – 8.5	20 °C	
Melting point	-20 °C		
Freezing point	*No data available*		
Initial boiling point and boiling range	≈ 85 °C		
Flash point	14 °C		
Evaporation rate	*No data available*		
Auto-ignition temperature	> 452 °C		
Upper/lower flammability or explosive limits	3.5 – 15 Vol-%		
Vapour pressure	*No data available*		
Vapour density	*No data available*		
Density	0.833 – 0.843 g/cm³	20 °C	
Bulk density	*not applicable*		
Water solubility	miscible	20 °C	
Dynamic viscosity	≈ 250 mPa* s	20 °C	
Kinematic viscosity	*No data available*		

9.2. Other information

Solvent content: 80% - 85%
The product is not explosive, but the formation of explosive vapour/air mixtures is possible.

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and handled as directed.

10.2. Chemical stability
Stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions
Reaction with: Oxidizing agent

10.4. Conditions to avoid
Vapour/air mixtures are explosive when heated. When heated, flammable vapours may be released.

10.5. Incompatible materials
Oxidizing agent

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10.6. Hazardous decomposition products
No dangerous decomposition products known.
In case of fire: Carbon monoxide, Carbon dioxide

SECTION 11: Toxicological information

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11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information

Mixture related information
LD_{50} oral: >10 mg/kg (Rat) OECD 401
ethanol CAS No.: 64-17-5 EC No.: 200-578-6
LD_{50} oral: >2,000 mg/kg (Rat) IUCLID
LD_{50} dermal: >2,000 mg/kg (Rat)
LC_{50} Acute inhalation toxicity (vapour): >20 mg/L (Rat) RTECS

Acute oral toxicity:
Based on available data, the classification criteria are not met.

Acute dermal toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity:
Based on available data, the classification criteria are not met.

Skin corrosion/irritation:
Based on available data, the classification criteria are not met.

Serious eye damage/irritation:
Causes serious eye irritation.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

Carcinogenicity:
Based on available data, the classification criteria are not met.

Reproductive toxicity:
Based on available data, the classification criteria are not met.

STOT-single exposure:
Based on available data, the classification criteria are not met.

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

Aspiration hazard:
Based on available data, the classification criteria are not met.

Additional information:
Classification according to Regulation (EC) No 1272/2008 [CLP]

11.2. Information on other hazards

Endocrine disrupting properties:
None of the ingredients are included.

Other information:
Inhalation of high vapour concentrations may cause narcotic effects. Skin absorption possible. May irritate mucous membranes.

SECTION 12: Ecological information

12.1. Toxicity

ethanol CAS No.: 64-17-5 EC No.: 200-578-6
LC_{50}: >1,000 mg/L 4 d (fish)
LC_{50}: =11,200 mg/L 1 d
EC_{50}: >1,000 mg/L 2 d (crustaceans, Daphnia magna)
EC_{50}: =275 mg/L 3 d
NOEC: =9.6 mg/L (crustaceans, Ceriodaphnia dubia)
ErC_{50}: >100 mg/L
LC_{50}: 8,140 mg/L 2 d (fish, Leuciscus idus (golden orfe))
EC_{50}: 6,500 mg/L (Algae/water plant, Pseudomonas putida)
NOEC: 250 mg/L (fish, Danio rerio)
ErC_{50}: 275 mg/L 3 d (Algae/water plant, Chlorella vulgaris)
ErC_{50}: =275 mg/L 3 d (Chlorella vulgaris)

Assessment/classification:
Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

ethanol CAS No.: 64-17-5 EC No.: 200-578-6
Biodegradation: Yes, rapidly
Remark: Readily biodegradable (according to OECD criteria).

Biodegradation:
No further relevant information available.

12.3. Bioaccumulative potential

ethanol CAS No.: 64-17-5 EC No.: 200-578-6
Log K_{OW}: -0.31

Bioconcentration factor (BCF):
No further relevant information available.

12.4. Mobility in soil
No further relevant information available.

12.5. Results of PBT and vPvB assessment

ethanol CAS No.: 64-17-5 EC No.: 200-578-6
Results of PBT and vPvB assessment: —
tetradecanol CAS No.: 112-72-1 EC No.: 204-000-3
Results of PBT and vPvB assessment: —

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties
None of the ingredients are included.

* 12.7. Other adverse effects
Product may contain organically bound halogen and contribute to the AOX value. Slightly hazardous to water. No adverse effects on the environment are known or expected if handled according to specifications. Do not allow to enter surface water/groundwater.
water hazard class 1: slightly hazardous to water

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste according to applicable legislation. Reuse (recycling) is preferable to disposal.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

07 06 04 *	other organic solvents, washing liquids and mother liquors

**: Evidence for disposal must be provided.*

Waste treatment options

Appropriate disposal / Package:

Hand in empty containers for local recycling, recovery or waste disposal. Contaminated packaging is to be emptied optimally, it can then be reused after appropriate cleaning. Packaging that cannot be cleaned should be disposed of in the same way as the substance.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1987	UN 1987	UN 1987	UN 1987
14.2. UN proper shipping name			
ALCOHOLS, N.O.S. (Ethanol)	ALCOHOLS, N.O.S. (Ethanol)	ALCOHOLS, N.O.S. (Ethanol)	ALCOHOLS, N.O.S. (Ethanol)
14.3. Transport hazard class(es)			
 3	 3	 3	 3
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Special Provisions: 274 | 601 | 640D The usual precautionary measures for handling chemicals must be observed. **Limited quantity (LQ):** 1 L / 30 kg **Excepted Quantities (EQ):** E2 **Hazard identification number (Kemler No.):** 33 **Classification code:** F1 **Tunnel restriction code:** (D/E) **Remark:** Transport category 2	**Special Provisions:** 274 | 601 | 640D The usual precautionary measures for handling chemicals must be observed. **Limited quantity (LQ):** 1 L / 30 kg **Excepted Quantities (EQ):** E2 **Classification code:** F1	**Special Provisions:** 274 The usual precautionary measures for handling chemicals must be observed. **Limited quantity (LQ):** 1 L / 30 kg **Excepted Quantities (EQ):** E2 **EmS-No.:** F-E, S-D	**Special Provisions:** A3 | A180 The usual precautionary measures for handling chemicals must be observed. **Limited quantity (LQ):** 1 L Y341 **Excepted Quantities (EQ):** E2 **Remark:** IATA Packing Instructions - Passenger: 353 IATA Maximum Quantity - Passenger: 5L IATA-Verpackungsanweisung - Cargo: 364 IATA Maximum Quantity - Cargo: 60L

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* 14.7. Maritime transport in bulk according to IMO instruments

Transport is only carried out in authorised and suitable packaging.

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Restrictions on use:

Restrictions on use (REACH, Annex XVII) Entry 3
Seveso category: P5c FLAMMABLE LIQUIDS

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compounds (VOC) content in percent by weight: 81

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1. Indication of changes

7.2.	Conditions for safe storage, including any incompatibilities
10.6.	Hazardous decomposition products
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.7.	Other adverse effects
14.6.	Special precautions for user
14.7.	Maritime transport in bulk according to IMO instruments

16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
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
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
ES	Exposure scenario
EWC	European Waste Catalogue
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
IUCLID	International Uniform Chemical Information Database
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
RTECS	Registry of Toxic Effects of Chemical Substances
SCL	Specific concentration limit
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations

VOC Volatile organic compounds

16.3. Key literature references and sources for data
No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids *(Flam. Liq. 2)*	H225: Highly flammable liquid and vapour.	
Serious eye damage/eye irritation *(Eye Irrit. 2)*	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.

16.6. Training advice
No data available

16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.