SAFETY DATA SHEET

NOVADAN®

Combi Des Gel 85%

NOVADAN®

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	20.12.2011
Revision date	18.01.2018

1.1. Product identifier

Product name	Combi Des Gel 85%
Article no.	26223, 41293, 41302, 41306

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

Product group	Handdisinfectant.
Relevant identified uses	SU4 Manufacture of food products SU20 Health services SU22 Professional uses: publicly accessible (administration, education, entertainment, services, craftsmen) PC8 Biocidal Products (e.g. Disinfectants, pest control) PROC11 Non-industrial spraying ERC8A Wide dispersive indoor use of processing aids in open systems
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Producer

Company name	Novadan ApS
Postal address	Platinvej 21
Postcode	DK-6000
City	Kolding
Country	Danmark
Telephone number	+ 45 76 34 84 00
Fax	+ 45 75 50 43 70
Email	sds@novadan.dk
Website	www.novadan.dk

1.4. Emergency telephone number

Emergency telephone	Description: UK: NHS: 111 EI: National Poisons Information Centre, 24/7: 01 809 2166

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 2; H225 Eye Irrit. 2; H319

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label	Ethanol 765 g/kg, Propan-2-ol 49 g/kg
Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.
Precautionary statements	P102 Keep out of reach of children. P210 Keep away from heat / sparks / open flames / hot surfaces. – No smoking. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

Description of hazard	The product is highly flammable and may be ignited even after short contact with an ignition source. Vapours may cause drowsiness and dizziness.
Health effect	Causes serious eye irritation. In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.
Environmental effects	This product does not contain any PBT or vPvB substances.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Ethanol	CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5 REACH Reg. No.: 01-2119457610-43-xxxx	Flam. Liq. 2; H225	60 -100 %	
Propan-2-ol	CAS No.: 67-63-0 EC No.: 200-661-7 Index No.: 603-117-00-0 REACH Reg. No.: 01-2119457558-25-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	5 -10 %	

Substance comments	Ingredients: Ethanol, Aqua, Isopropyl Alcohol, Glycerin, T-Butyl Alcohol, Polyacrylic Acid, Aminomethyl Propanol - The full text for all hazard statements is displayed in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Remove affected person from source of contamination.
Inhalation	Fresh air. Get medical attention if any discomfort continues.
Skin contact	The product is intended for skin contact.
Eye contact	Immediately rinse with water for several minutes. Make sure to remove any contact lenses from the eyes before rinsing. Contact physician if irritation persists.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Get medical attention if any discomfort continues.
Recommended personal protective equipment for first aid responders	Wear necessary protective equipment. For personal protection, see section 8.

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

Acute symptoms and effects	Eye contact may cause: May irritate and cause redness and pain.
Delayed symptoms and effects	Inhalation of high vapour concentrations may cause symptoms such as mild irritation, headache, dizziness, fatigue, nausea and in serious cases unconsciousness.

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

Other information	If unconscious: Call an ambulance/physician immediately. Show this Safety Data Sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Improper extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures. Closed containers can burst violently when heated, due to excess pressure build-up.

5.3. Advice for firefighters

Personal protective equipment	Wear necessary protective equipment. For personal protection, see section 8.
Fire fighting procedures	Reference is made to the company fire procedure. If risk of water pollution

occurs, notify appropriate authorities. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures. Containers close to fire should be removed immediately or cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Wear necessary protective equipment. For personal protection, see section 8. Do not smoke or use open fire, or other sources of ignition.

6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.

6.3. Methods and material for containment and cleaning up

Cleaning method	Absorb spillage with non-combustible, absorbent material. Wash contaminated area with water.

6.4. Reference to other sections

Other instructions	See section 8 and section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	No naked lights. No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in tightly closed original container in a well-ventilated place. Do not store near heat sources or exposed to high temperatures.
Other Information	Follow rules for flammable liquids.

Conditions for safe storage

Storage temperature	Value: 0 -30 °C
Storage stability	Durability: 36 months.

7.3. Specific end use(s)

Specific use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Ethanol	CAS No.: 64-17-5	Limit value (8 h) : 1000 ppm Limit value (8 h) : 1900 mg/	TWA Year: 2011

		m3 Limit value (8 h) : 1000 ppm Limit value (8 h) : 1920 mg/m³	
Propan-2-ol	CAS No.: 67-63-0	Limit value (8 h) : 200 ppm Limit value (8 h) : 490 mg/m3 Limit value (8 h) : 400 ppm **Limit value (short term)** Value: 1250 mg/m³	TWA Year: 2011

DNEL / PNEC

Substance	Ethanol
DNEL	**Group:** Consumer **Route of exposure:** Long-term oral (systemic) **Value:** 87 mg/kg bw/day **Reference:** ECHA **Group:** Professional **Route of exposure:** Acute inhalation (local) **Value:** 1900 mg/m³ **Reference:** ECHA **Group:** Professional **Route of exposure:** Long-term dermal (systemic) **Value:** 343 mg/kg bw/day **Reference:** ECHA **Group:** Professional **Route of exposure:** Long-term inhalation (systemic) **Value:** 950 mg/m³ **Reference:** ECHA **Group:** Consumer **Route of exposure:** Long-term inhalation (systemic) **Value:** 114 mg/m³ **Reference:** ECHA **Group:** Consumer **Route of exposure:** Acute inhalation (local) **Value:** 950 mg/m³ **Reference:** ECHA **Group:** Consumer **Route of exposure:** Long-term dermal (systemic) **Value:** 206 mg/kg bw/day **Reference:** ECHA
PNEC	**Route of exposure:** Sediment **Value:** 2,9 mg/L **Route of exposure:** Water **Value:** 0,96 mg/L **Route of exposure:** Water

	Value: 0,79 mg/L **Route of exposure:** Water **Value:** 2,75 mg/L **Route of exposure:** Sewage treatment plant STP **Value:** 580 mg/L **Route of exposure:** Sediment **Value:** 3,6 mg/kg sediment dw **Route of exposure:** Soil **Value:** 0,63 mg/kg soil dw **Reference:** ECHA
Substance	Propan-2-ol
DNEL	**Group:** Consumer **Route of exposure:** Long-term inhalation (systemic) **Value:** 89 mg/m³ **Reference:** ECHA **Group:** Professional **Route of exposure:** Long-term dermal (systemic) **Value:** 888 mg/kg bw/day **Reference:** ECHA **Group:** Professional **Route of exposure:** Long-term inhalation (systemic) **Value:** 500 mg/m³ **Reference:** ECHA **Group:** Consumer **Route of exposure:** Long-term dermal (systemic) **Value:** 319 mg/kg bw/day **Reference:** ECHA **Group:** Consumer **Route of exposure:** Long-term oral (systemic) **Value:** 26 mg/kg bw/day **Reference:** ECHA
PNEC	**Route of exposure:** Sewage treatment plant STP **Value:** 2251 mg/l **Route of exposure:** Soil **Value:** 25 mg/kg **Route of exposure:** Freshwater **Value:** 140,9 mg/l **Route of exposure:** Saltwater sediments **Value:** 552 mh/kg **Route of exposure:** Freshwater sediments **Value:** 552 mg/kg **Route of exposure:** Saltwater

Value: 140,9 mg/l

Value: 140,9
Reference: Intermittent releases

8.2. Exposure controls

Safety signs

Precautionary measures to prevent exposure

Technical measures to prevent exposure	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye / face protection

Suitable eye protection	Wear approved chemical safety goggles where eye exposure is reasonably probable. (EN 166).

Hand protection

Skin- / hand protection, long term contact	Not relevant.

Skin protection

Additional skin protection measures	No special precautions.

Respiratory protection

Respiratory protection necessary at	Under normal conditions of use respiration protection should not be required.

Thermal hazards

Thermal hazards	See section 5.

Appropriate environmental exposure control

Environmental exposure controls	See section 6.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Gel.
Colour	Colourless.
Odour	Odour of alcohol.

Odour limit	Comments: Not relevant.
pH	Status: In delivery state Value: 7 -9 Status: In aqueous solution Comments: Not relevant.
Melting point / melting range	Comments: Not relevant.
Boiling point / boiling range	Comments: Not relevant.
Flash point	Value: < 21 °C Comments: Fire hazard classification: I-2.
Evaporation rate	Comments: Not relevant.
Flammability	Not relevant.
Explosion limit	Comments: Not relevant.
Vapour pressure	Comments: Not relevant.
Vapour density	Comments: Not relevant.
Relative density	Value: ~ 0,85 kg/l
Solubility	Comments: Completely soluble in water.
Partition coefficient: n-octanol/ water	Comments: Not relevant.
Auto-ignition temperature	Comments: Not relevant.
Decomposition temperature	Comments: Not relevant.
Viscosity	Comments: No data recorded.
Explosive properties	Not explosive.
Oxidising properties	Does not meet the criteria for oxidising.

9.2. Other information

Other physical and chemical properties

Comments	No data recorded.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	See section 10.4 and section 10.5.

10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid	No information.

10.6. Hazardous decomposition products

Hazardous decomposition products	During fire, toxic gases (CO, CO2) are formed.

Other information

Other information	No data recorded.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Ethanol
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** 10470 mg/kg **Animal test species:** Rat **Test reference:** OECD Guideline 401 **Type of toxicity:** Acute **Effect tested:** LC50 **Route of exposure:** Inhalation. **Duration:** 4 hour(s) **Value:** 117 -125 mg/L **Animal test species:** Rat **Test reference:** OECD Guideline 401
Substance	Propan-2-ol
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** 5840 mg/kg **Animal test species:** Rat **Test reference:** OECD Guideline 401 **Comments:** ECHA **Type of toxicity:** Acute **Effect tested:** LC50 **Route of exposure:** Inhalation. **Duration:** 6 hour(s) **Value:** > 10000 ppm **Animal test species:** Rat **Test reference:** OECD Guideline 403 **Comments:** ECHA **Type of toxicity:** Acute

	Effect tested: LD50 **Route of exposure:** Dermal **Duration:** 24 hour(s) **Value:** 16,4 ml/kg **Animal test species:** Rabbit **Test reference:** OECD Guideline 402 **Comments:** ECHA
Other toxicological data	Toxicological tests on the product has not been performed.

Other information regarding health hazards

Assessment of acute toxicity, classification	No evidence for acute toxicity.
Inhalation	In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.
Skin contact	Skin irritation is not anticipated when used normally.
Eye contact	Eye contact may cause lacrimation, redness, smarting and discomfort.
Ingestion	Ingestion may cause irritation of the gastrointestinal tract, vomiting and diarrhoea.
Sensitisation	No evidence for respiratory nor skin sensitization.
Mutagenicity	No evidence for germ cell mutagenicity.
Carcinogenicity, other information	No evidence for carcinogenicity.
Reproductive toxicity	No evidence for reproductive toxicity.
Assessment of specific target organ toxicity - single exposure, classification	No evidence for STOT-single exposure.
Assessment of specific target organ toxicity - repeated exposure, classification	No evidence for STOT-repeated exposure.
Assessment of aspiration hazard, classification	No evidence for aspiration hazard.

Symptoms of exposure

Symptoms of overexposure	No specific symptoms noted.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Propan-2-ol
Aquatic toxicity, fish	**Value:** 8970 - 9280 mg/l **Test duration:** 48 hour(s) **Species:** Leuciscus idus melanotus **Method:** LC50
Substance	Propan-2-ol
Aquatic toxicity, algae	**Value:** 1800 mg/l

	Test duration: 8 day(s) **Species:** Scenedesmus quadricauda **Method:** TGK
Substance	Propan-2-ol
Aquatic toxicity, crustacean	**Value:** 9715 mg/l **Test duration:** 24 hour(s) **Species:** Daphnia magna **Method:** LC50
Ecotoxicity	Not classified as dangerous to the environment.
Aquatic, comments	No data available for the product.

12.2. Persistence and degradability

Substance	Propan-2-ol
Biodegradability	**Value:** 95 % **Method:** OECD 301E **Test period:** 21 day(s)
Persistence and degradability, comments	The product is easily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	The product is not bioaccumulating.

12.4. Mobility in soil

Mobility	The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Environmental details, summation	For this product no classification is required for environmental hazards.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point. Dispose of waste and residues in accordance with local authority requirements. -
EWC waste code	EWC waste code: 0706 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics Classified as hazardous waste: Yes
EWL packing	EWC waste code: 0706 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics Classified as hazardous waste: Yes
Other information	When handling waste, consideration should be made to the safety precautions

	applying to handling of the product. Waste code applies to product remnants in pure form.

SECTION 14: Transport information

14.1. UN number

ADR/RID/ADN	1987
IMDG	1987
ICAO/IATA	1987

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	ALCOHOLS, N.O.S.
ADR/RID/ADN	ALCOHOLS, N.O.S.
Technical name/danger releasing substance ADR/RID/ADN	Ethanol, Propan-2-ol
IMDG	ALCOHOLS, N.O.S.
Technical name/danger releasing substance IMDG	Ethanol, Propan-2-ol
ICAO/IATA	ALCOHOLS, N.O.S.
Technical name/danger releasing substance ICAO/IATA	Ethanol, Propan-2-ol

14.3. Transport hazard class(es)

ADR/RID/ADN	3
Classificaton code ADR/RID/ADN	F1
IMDG	3
ICAO/IATA	3

14.4. Packing group

ADR/RID/ADN	II
IMDG	II
ICAO/IATA	II

14.5. Environmental hazards

IMDG Marine pollutant	No

14.6. Special precautions for user

Special safety precautions for user	Not relevant.

14.7. Maritime transport in bulk according to IMO instruments

Product name	ALCOHOLS, N.O.S.

Additional information

Hazard label ADR/RID/ADN	3
Hazard label IMDG	3
Hazard label ICAO/IATA	3

ADR/RID Other information

Tunnel restriction code	D/E
Transport category	2
Hazard No.	33
Other applicable information ADR/RID	33

IMDG Other information

EmS	F-E, S-D

SECTION 15: Regulatory information

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

Other label information	For professional users only.
Biocides	Yes
Legislation and regulations	The Management of Health and Safety at Work Regulations 1999 (SI 1999 No. 3242). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. REGULATION (EU) No 528/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 May 2012 concerning the making available on the market and use of biocidal products. The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895). The Cosmetic Products (Safety) Regulations 2003 (S.I 2003 No. 835).

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Training advice	No particular training or education is required but the user must be familiar with this SDS. Users must be carefully instructed in the proper work procedure, the dangerous properties of the product and the necessary safety instructions.
Information added, deleted or revised	Change to Sections: 1, 3, 16
Version	7
Prepared by	ALM