according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

Plum disinfector 85% hygienic hand sanitizer gel

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(manufacturers): 25. 02. 2015 / 11. 11. 2015Date of issue: 24. 05. 2018Oldal: 1/(12)Latest revision: 02. 03. 2020

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

- 1.1 Product identifier: Plum disinfector 85% hygienic hand sanitizer gel
- 1.2 Relevant identified uses of the <u>mixture</u> or substance and uses advised against Relevant identified uses: hand sanitizer Uses advised against: not suitable for surface disinfection.
- 1.3 Details of the supplier of the safety data sheet:

Supplier details: Plum A/S Frederik Plums Vej 2 5610 Assens, DENMARK Tel: +45 64712112 Fax: +45 64712125 E-mail: info@plum.dk Distributor details: Plum Magyarország Kft 8200 Veszprém, Erdész u. 4. Tel.: + 36 88 326006 Fax: + 36 88 326006 E-mail: info@plum.hu http://plum.hu

 1.4 Emergency telephone number Health Toxicological Information Service (ETTSZ 1096 Budapest, Nagyvárad tér 2.) Tel.: +36 80 201 199 (0-24 h, free number).

SECTION 2 Hazards identification

2.1 Classification of the <u>mixture</u> or substance Hazard Class and Category: Hazard statement: Flam. Liq. 2 H225 Highly flammable liquid and vapour. Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Product identification:	Trade name:	Plum disinfector 85% hygienic hand sanitizer gel
Hazardous components:	Isopropyl alco	ohol; Tert-butyl alcohol

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GHS Pictogram:



Signal word:

Hazard statement:H225Highly flammable liquid and vapour.H319Causes serious eye irritation.

Supplemental hazard information: -

Precautionary statements – General:

P101	If medical advice is needed, have product container or label at hand
P102	Keep out of reach of children.

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 +	IF IN EYES: Rinse cautiously with water for several minutes. Remove
P338	contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Precautionary statements - Storage: -

Precautionary statements – Disposal:**P501**Dispose of contents/container in accordance with national regulation.

Other liabilities for labelling:

Tactile warning of danger: required for distribution population. Transport classification: see section 14.

2.3 Other hazards

The product does not contain any PBT or vPvB substance according to annex XIII of regulation (EC) 1907/2006.

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SECTION 3 Composition/information on ingredients

3.2 Mixtures

Chemical description: A mixture of the following substances.

Component(s) / Hazardous component(s):

Name	EC number	CAS number	Hazard classes and cat.	Hazard statements	Conc. %(m/m)
Ethanol	200-578-6	64-17-5	Flam. Liq. 2	H225	65-85
REACH Registr. Nr.:			Eye Irrit. 2	H319	
01-2119457610-43					
Isopropyl alcohol	200-661-7	67-63-0	Flam. Liq. 2	H225	5-15
REACH Registr. Nr.:			Eye Irrit. 2	H319	
01-2119457558-25			STOT SE 3	H336	
Glycerol	200-289-5	56-81-5	-	-	1-5
REACH Registr. Nr.:					
not necessary					
Tert-butyl alcohol	200-889-7	75-65-0	Flam. Liq. 2	H225	1-5
REACH Registr. Nr.:			Eye Irrit. 2	H319	
not necessary			Acute Tox. 4	H332	
			STOT SE 3	H335	
1,1',1",1"'-	203-041-4	102-60-3	Eye Irrit. 2	H319	<1
ethylenedinitrilotetrapropan					
-2-ol					
REACH Registr. Nr.:					
not necessary					
2-Propenoic acid,	618-347-7	9003-01-4	Eye Irrit. 2	H319	<1
homopolymer			Aquatic Chronic 3	H412	
REACH Registr. Nr.:					
not necessary					

The full text of each relevant H- phrase and Hazard classes and cat. see in Section 16.

SECTION 4 First aid measures

4.1 Description of first aid measures

General information: Never give anything by mouth to an unconscious person, or never induce vomiting.

Inhalation:Remove exposed person to fresh air and keep warm. Get medical attention.Skin contact:In case of accidental skin contact: wash with water. If irritation persists, obtain medical attention.

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Eye contact:	Flush immediately with plenty of running water for at least 10 minutes, holding the eyelids open. Remove contact lenses, if present and easy to do.
	Get medical attention.
Ingestion:	Do not induce vomiting. Rinse mouth thoroughly. Drink 1-2 glasses of water
	with the injured person in small sips. Get medical attention.

Protection of first-aid person: Direct contact with the substance, inhalation of vapors should be avoided.

- 4.2 Most important symptoms and effects, both acute and delayed In high concentration and prolonged exposure the vapours are narcotic if inhalated. Inhalation of vapours may cause drowsiness, indisposition, stomachache, headache, depression, and unconsciousness. Prolonged and/or repeated contact may cause skin irritation, depending on individual sensitivity. May be irritating to eyes.
- 4.3 Indication of any immediate medical attention and special treatment need Treat symptomatically.

SECTION 5 Fire-fighting measures

Fire hazards: Flammable.

5.1 Extinguishing media Suitable extinguishing media: Foam, dry chemical, water spray, CO₂.

> Unsuitable extinguishing media: Water jet.

- 5.2 Special hazards arising from the <u>mixture</u> or substance Hazardous combustion products: On burning carbon-monoxide, carbon dioxide can be formed.
- 5.3 Advice for fire-fighters

Special protective equipment:

According to the existing fire-fighting regulations. Respiratory protection.

Further information:

If possible, remove the product from fire Cool containers exposed to fire with water spray from save distance. Vapours may form explosive mixture with air.

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SECTION 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Personal precautions: see Section 8.
 Keep away from sources of ignition. –No smoking.
 Avoid contact with eyes, inhalation of vapours.
 Danger of slipping on leaked out/spilled product.
- 6.2 Environmental precautions: Prevent spills from entering in

Prevent spills from entering into natural water, soil and drains by containing the liquid. Notify relevant authority.

- 6.3 Methods and material for containment and cleaning up
 - On soil: Keep away from all sources of ignition No smoking. Stop leak if you can do so without risk. Sufficient ventilation should be provided. Use nonsparking, explosion-proof devices. Collect spillage with non-combustible liquid-absorbent material (sand, diatomaceous earth, acid binder, universal liquid binder) and place in an appropriate storage container. Dispose of as hazardous waste.

Dispose of according to local regulations. Clean up with large amount of water the contaminated area.

- On water: Notify local authorities according to regulations.
- 6.4 Reference to other sections Personal precautions: see section 8. Waste treatment methods: see section 13.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

Keep general measures applied for normal operations with chemicals and flammable liquids. Adequate ventilation required.

Keep material away from and open flame. No smoking.

Take precautionary measures against static discharges.

Avoid contact with eyes, inhalation of vapours.

Ensure washing facilities after working hours and before breaks.

When using do not eat or drink and do not smoke.

Handling temperature: no data.

SAFETY DATA SHEET according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC Plum disinfector 85% hygienic hand sanitizer gel Version: 2 Previous Issue / Date of last revision Date of issue: 24. 05. 2018 Oldal: 6/(12) (manufacturers): 25. 02. 2015 / 11. 11. 2015 Latest revision: 02. 03. 2020 7.2 Conditions for safe storage, including any incompatibilities Keep general measures applied for safe storage for flammable liquids. Store in cool, well-ventilated area, in original, radiant heat, open flame and strong oxidizing agents. Keep out of the reach of children. Storage temperature: 0-30°C. 7.3 Specific end use(s) Hand sanitizer. **SECTION 8 Exposure controls / personal protection** Engineering control measures: Adequate ventilation. 8.1 Control parameters: TLV (TWA) $980 \text{ mg/m}^3 (400 \text{ ppm})$ Isopropyl alcohol: USA [ACGIH] 1920 mg/m^3 (1000 ppm) Ethanol: TLV (TWA) 8.2 **Exposure** controls Personal protection: Respiratory protection: Under normal conditions not required. In case of exceeded exposure-limits (respiratory protection with particle-filter (typ. A) is recommended. Hand protection: Protective gloves if there is a risk of prolonged skin contact. Eve protection: Where splashing is possible, wear protective goggles (EN 166). Skin protection: Protective clothing. Personal protective equipment is primarily for working with Other special: large quantities, or required in the event of an accident. An emergency eye wash station shall be available at the workplace. Environmental exposure controls: Do not discharge into drains/surface waters/groundwater. SECTION 9 **Physical and chemical properties** 9.1 Information on basic physical and chemical properties Appearance: Physical state: liquid (gel)

colorless

alcohol

Colour:

Odour:

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Change in physical state:	
Pour point:	no data
Boiling point:	78°C
Others:	
Flash point:	<21°C
Ignition point:	no data
Autoignition temperature:	no
Explosive properties:	formation of explosive air/steam
	mixtures is possible.
Explosion limits: lower/upper:	no data
Decomposition temperature:	no data
Oxidizing properties:	no data
Vapour pressure at 20°C:	no data
Density at 20°C.	$0.800 - 0.900 \text{ g/cm}^3$
Solubility in water at 20°C:	soluble
Thermal decomposition:	no data
n-Octanol/water partition coefficient:	no data
pH (undiluted):	7-9
Viscosity at 20 °C:	no data

9.2 Other information No data.

SECTION 10 Stability and reactivity

10.1 Reactivity:	Strong oxidizing agents.
10.2 Chemical stability:	No decomposition if stored and handled properly.
10.3 Possibility of hazardous reactions:	Contact with strong oxidizing agents may cause the product to heat up and create explosive vapors.
10.4 Conditions to avoid:	Keep away from sources of ignition - Avoid overheating.
10.5 Incompatible materials:	Strong oxidizing agents.
10.6 Hazardous decomposition products:	No dangerous decomposition products are formed under normal conditions. Hazardous combustion products: See Section 5.

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SECTION 11 Toxicological information

11.1 Information on toxicological effects Acute toxicity: No data for the product.

Components:			
Ethanol:			
Oral:	LD ₅₀ (rat):	>2000 mg/kg	(OECD 401)
Dermal:	LD ₅₀ (rabbit)	>2000 mg/kg	(OECD 402)
Inhalation:	LC ₅₀ (mouse):	>20 mg/l/4 /h	
Isopropyl alcohol:			
Oral:	LD_{50} (rat):	>2000 mg/kg	(OECD 401)
Dermal:	LD ₅₀ (rabbit)	>2000 mg/kg	(OECD 402)
Inhalation:	LC ₅₀ (rat):	>20 mg/l/8 /h	

Acute toxicity: irritation

Skin contact:	not irritant (based on components)
Eye contact:	irritant (based on components)

Respiratory or skin sensitisation: not sensitising (based on components)

Other information, specific effects:

Germ cell mutagenicity:	not known, resp. not mutagen (based on components)		
Carcinogenicity:	not known, resp. not carcinogen (based on components)		
Reproductive toxicity:	not known, resp. no reproduction-damaging effect		
	(based on components)		
STOT-single exposure:	not classified		
STOT-repeated exposure:	not classified		
Aspiration hazard:	not classified		

SECTION 12 Ecological information

101	m • • •
12.1	Toxicity
	10

oxicity	No data available for the preparation.			
Components:				
Ethanol:				
Fish (Leuciscus idus melanotus):	LC_{50}	>100 mg/l (48 h)		
Algae (Chlorella pyreniodosa):	EC_{50}	5 000 mg/l		
Daphnia (Daphnia magna):	EC ₅₀	>100 mg/l (24 h)		
Bacterium (Pseudomonas putida):	EC_0	6500 mg/l (16 h)		
Isopropyl alcohol:				
Fish (Leuciscus idus melanotus):	LC ₅₀	>100 mg/l (48 h)		
Algae (Scenedesmus subspicatus):		>100 mg/l (72 h)		
Daphnia (Daphnia magna):	EC50	>100 mg/l (48 h)		

SAFETY DATA SHEET according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC Plum disinfector 85% hygienic hand sanitizer gel Version: 2 Previous Issue / Date of last revision Date of issue: 24. 05. 2018 Oldal: 9/(12) (manufacturers): 25. 02. 2015 / 11. 11. 2015 Latest revision: 02. 03. 2020 12.2 Persistence and degradability **Biodegradability**: The product is readily biodegradable. 12.3 Bioaccumulative potential Not bioaccumulation. 12.4 Mobility Mobility in soil: No data. Mobility in water: Soluble in water. 12.5 Results of PBT and vPvB assessment Does not contain PBT and vPvB substances. 12.6 Other adverse effects Environmental effects: Large spills may be hazardous to the environment. Water hazard class (German): **SECTION 13 Disposal considerations** 13.1 Waste treatment methods Product disposal: Wastes of the product or used oil should be treated as hazardous waste. Waste Identification Code: 07 06 04* Other organic solvents, washing liquids and mother liquors. Waste Identification Code: 16 03 05*

Organic wastes containing dangerous substances. (manufacturer's recommendation)

Disposal must be in compliance with national and local regulations.

Packaging disposal:

Containers with product residue should also be treated as hazardous waste according to national and local disposal regulations.

Waste Identification Code: 15 01 10*

Packaging containing residues of or contaminated by dangerous substances.

Contaminated packaging can be recycled after cleaning.

Recommended waste treatment method: no data

Disposal must be in compliance with national and local regulations.

Wastewater:

Quality of wastewater emitted to natural water must comply with national and local regulations.

Care should be taken in any case to ensure compliance with EC, national and local regulations. It is the responsibility of the user to know all relevant national and local regulations.

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SECTION 14 Transport information

	Land transport: Road/ Railway	ADR/RID:	
14.1	UN number:		1987
14.2	UN proper shipping name:		ALCOHOLS, N.O.S.
			(Ethanol, Isopropyl alcohol)
14.3	Transport hazard class(es):		3
14.4	Packing group:		II
	Hazard label:		3
14.5	Environmental hazards:		no
14.6	Special precautions for user:		
	Tunnel restriction code:		D/E
	Class:		3
	Hazard identification No.:		33
	Waterways:		
14.1	UN number:		1987
14.2	UN proper shipping name:		ALCOHOLS, N.O.S.
			(Ethanol, Isopropyl alcohol)
14.3	Transport hazard class(es):		3
14.4	Packing group:		II
14.5	Environmental hazards:		no
14.6	Special precautions for user:		
	EMS No.:		F-E, S-D
	Air transport: ICAO / IATA:		
14.1	UN number:		1987
14.2	UN proper shipping name:		ALCOHOLS, N.O.S.
			(Ethanol, Isopropyl alcohol)
14.3	Transport hazard class(es):		3
14.4	Packing group:		II
14.5	Environmental hazards:		no
14.6	Special precautions for user:		-
SEC			

- 15.1 Safety, health and environmental regulations/legislation specific for the mixture or substance. This safety data sheet has been prepared according to Regulation (EC) No 1907/2006 (mod.: 2015/830/EU) and to Regulation (EC) 1272/2008.
- 15.2 Chemical safety assessment. not available

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

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SECTION 16 Other information

Source of data presented in this material safety data sheet: Test results of this product Material safety data sheets of product's components 1272/2008/EC regulation, Annex XVII. of REACH Relevant Hungarian and EU regulations

Classification for mixtures and used evaluation method according to regulation 1272/2008/EC

Flam. Liq. 2	H225	calculation method
Eye Irrit. 2	H319	calculation method

The full text of each relevant Hazard classes and cat. and H- phrase in Section 3.:

H225 H319 H332 H335 H336 H412	Highly flammable liquid and vapour.Causes serious eye irritation.Harmful if inhaled.May cause respiratory irritation.May cause drowsiness or dizziness.Harmful to aquatic life with long lasting effects.
Flam. Liq. 2	Flammable liquid Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2.
Acute Tox. 4	Acute toxicity Category 4
STOT SE 3	Specific target organ toxicity — single exposure Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment, Chronic Category 3

Legend:

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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BOD	Biological Oxygen Demand
Bw	Body Weight
C&L	Classification and Labelling
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic or toxic to Reproduction
COD	Chemical Oxygen Demand
CSA	Chemical Safety Assessment

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CSR	Chemical Safety Report
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
ECHA	European Chemicals Agency
Ecx	Effective Concentration x%
ErC50	EC50 in terms of reduction of growth rate
Edx	Effective Dose x%
EC	European Community
EC number	European Community number
ELINCS	European List of Notified Chemical Substances
ES	Exposure Scenario
ESIS	European Chemical Substances Information System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LCx	Lethal Concentration x%
LDx	Lethal Dose x%
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest Observed Effect Level
NOEC	No observed effect concentration
NOEL	No observed effect level
NLP	No-Longer Polymer
NOAEL	No Observed Adverse Effect Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts/million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International carriage of Dangerous Goods by Rail
SVHC	Substance of Very High Concern
UVCB	substance of unknown or variable composition, complex reaction products or biological
NOC	materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bio-accumulative

Revision Indicators:					
Section	Subject of change	Date	Version		
8	Control parameters:	02.03.2020	2		