On the basis of the Commission Regulation (EU) No 830/2015 of 28.05.2015

INGEN 80% ALCOHOL BASED HAND SANITISER

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SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier Trade name: INGEN 80% ALCOHOL BASED HAND SANITISER Product registration number: 1.2 Relevant identified uses of the substance or mixture and uses advised against Hygienic hand disinfection. General use. Uses advised against: any other than listed above 1.3 Information on supplier of the Safety Data Sheet Ingenia Life Solutions Ltd Quercus Court, Armstrong Way, Great Western Business Park, Yate, Bristol, BS37 5NG phone: +44 (0)117 978 4777 e-mail: info@ingenia.co.uk 1.4 **Emergency phone number** 112/999

SECTION 2: Hazards Identification 2.1 Mixture classification Classification based on Regulation 1272/2008 The mixture has been classified as hazardous. Flam. Liq. 2 H225 - Highly flammable liquid and vapors, cat.2 Eye Irrit.2 H319 Eye irritant, cat.2 2.2 Label elements Labeling based on Regulation 1272/2008 Signal word DANGER Pictograms GHS02 GHS07 Hazard statements H225 Highly flammable liquid and vapors, cat.2 H319 Eye irritant **Precautionary statements** P241 Use explosion-proof electric/ventilation/ lighting equipment P305 + P351+P338 IF PRODUCT GETS INTO EYES: Rinse cautiously with water for several minutes. Remove the contact lenses, if any, if they can be removed easily. Keep rinsing.

SAFETY DATA SHEET On the basis of the Commission Regulation (EU) No 830/2015 of 28.05.2015 **INGEN 80% ALCOHOL BASED HAND SANITISER** Issue date: 04.05.2020 Update date: Version 1 Page/pages 2/11 Storage Store away from heat sources/ fire and sparking sources, hot surfaces. P210 Smoking prohibited P233 Keep container tightly closed. P403 +P235 Store in a well-ventilated place. Store in a cool place. Disposal P501 Dispose of contents/container in accordance with local/national regulations. Additional information: None **Contains:** None 2.3 Other hazards The product does not meet the PBT or vPvB classification criteria according to annex XIII to regulation REACH

Ethanol may generate explosive mixtures with air

SECTION 3: Composition/ information on ingredients

3.1 Substances

not applicable

3.2 Mixture

Chemical characterization: mixture of substances.

Substance name	Identifier	Classification 1272/2008		% weight
Ethanol Ethyl alcohol	Index 603-002-00-5 CAS 64-17-5 EC 200-578-6 REACH 01-2119457610-43	Flam.Liq. 2 Eye Irrit. 2	H225 H319	80
Xanthan gum	CAS 1138-66-2 EC 234-394-2			0,5
Methyl ethyl ketone	Index 606-002-00-3 CAS 78-93-3 EC 201-159-0	Flam. Liq. 2 Eye irrit.2 STOT SE 3	H225 H319 H336	<1
Glycerol	CAS 56-81-5 EC 200-289-5			2
Isopropyl alcohol	Index 603-117-00-0 CAS 67-63-0 EC 200-661-7 REACH 01-2119457558-25	Flam. Liq. 2 Eye irrit.2 STOT SE 3	H225 H319 H336	<1
Denathonium benzoate (bitrex)	Index CAS 3734-33-6 EC 223-095-2	Acute Tox. 4 Acute Tox. 4 Aquatic Chronic 3	H302 H332 H412	<0.1

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Full text of H phrases and acronyms of symbols, hazard classes and category codes can be found in section 16 of the Safety Data Sheet.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled:

Remove victim to fresh air. Keep them warm and at rest, loosen tight clothing items. If necessary - apply artificial respiration or oxygen - preferably by a trained person. Seek medical attention.

If swallowed:

Due to contamination of ethanol used for industrial purpose, in any case make victim drink a large quantity of water, do not induce vomiting, in case of serious poisoning, bring the victim to hospital for observation and potential treatment.

Contact with eyes:

Remove contact lenses. Rinse eyes with a large quantity of warm water for 15-20 minutes, holding eyelids apart, remove contact lenses.

Seek advice of ophthalmologist in case of irritation.

Skin contact:

Product designated for contact with skin. If used in accordance with the user manual, no negative effects to health should be expected.

In case of any symptoms causing concern, consult a physician.

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

The product may cause irritation of respiratory tract, skin irritation, eye damage, drowsiness and dizziness.

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

If the patient is unconscious, place them in recovery position, keep them calm and warm, control breathing and heart rate. Never induce vomiting or administer anything orally to a person, who is unconscious or dizzy. Show the Safety Data Sheet to medical personnel providing assistance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate extinguishing media:

Carbon dioxide CO₂, powder extinguishers, fire fighting foam resistant to alcohol. Water spray jet or water mist.

Inappropriate extinguishing media:

Do not use direct water streams on the surface of burning mixture.

5.2. Special hazards arising from the mixture

A highly flammable liquid, sensitive to electrostatic discharge. Vapors heavier than air disperse near the ground level, accumulate in lower parts of confined spaces and below the ground level. **Explosion hazards.**

Under favorable conditions of temperature and humidity, explosive mixtures with air are generated. Containers with mixture exposed to flames or high temperatures may explode.

5.3. Advice for firefighters

Use standard methods of extinguishing chemical fires.

Containers exposed to high temperatures are to be cooled with water and, if possible, remove from area exposed to hazard.

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Apply water spray jet to vapors of the product. Firefighter protective equipment: Follow the procedures applicable to extinguishing fires of chemicals. Prevent extinguishing media and sewage after the fire extinguishing action from escaping to drains and waterways. Clothing resistant to high temperatures. Self-contained breathing apparatus with independent air circulation. Use explosimeters.				
SEC	ΓΙΟΝ 6: Accidental relea	se measures		
6.1.	 Personal precautions, protective equipment and emergency procedures Remove the potential ignition sources. Do not smoke. Do not use sparking tools. Use personal protection measures to protect the respiratory tract from vapors/ aerosols of the product. Avoid inhaling vapors. Place proper signs and close the hazard zone. Ensure proper ventilation. Remove vapors with water mist. Call the Fire Service if necessary. Follow the internal fire protection regulations. 			
6.2.	Environmental precaut	tions		
	If possible and safe, eliminate or limit release of the product. Collect the released mixture as quickly as possible. Secure drains. Prevent environmental pollution. In the event of a serious contamination of a waterway, sewage system or soil, notify relevant administrative and control authorities, as well as rescue services.			
6.3.	In the case of unsealing the hazard area and avo Absorb with liquid-bindir Place in a replacement Clean the decontaminat	for containment and clean of container or spilling of poid inhaling vapors. Ing material (sand, diatomite, v container and mark as design ed area with a large quantity to surface waters, warn the	oduct, secure the dam ermiculite, silica gel). ated for disposal. of water with detergent.	

6.4. Reference to other sections

Personal precautions: section8

Neutralization methods: section 13

SECTION 7: Handling and storage of substances and mixtures

7.1. Precautions for safe handling

When handling the mixture in any manner:

- Prevent starting and spreading of fire,

- Prevent formation of aerosols.
- Prevent discharges to the environment,
- Prevent discharges to sewage system.
- General rules of occupational health and safety are applicable:

- When using the product: do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities Warehouses must be adapted for storage of hazardous, highly flammable products.

Store only in the original container with a properly marked label in Polish, consistent with the legal provisions in force. Keep container tightly closed. Handle open containers very carefully to avoid spilling

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Storage temperature 5 - 25°C. Empty product containers may contain flammable vapors causing an explosion hazard. Do not weld, solder, drill, cut or burn empty containers unless properly cleaned of product remains. Protect against exposure to sunlight and strong heat sources.					

Read the safety data sheets or labels.

7.3. Specific end use(s) No data

SECTION 8: Exposure controls/ personal protection

8.1. Control parameters

National regulations for maximum acceptable concentrations and intensities in the work environment,

according to Regulation of the Minister of Family, Labor and Social Policy of 12.06.2018 (Journal of Laws no. 2018 item 1286) on maximum permissible concentration and intensity of harmful factors in the work environment

SUBSTANCE	IDENTIFIER	NDS (mg/m³)	NDSCh (mg/m³)	NDSP (mg/m ³)
Ethanol	CAS 64-17-5	1900		
Glycerol	CAS 56-81-5	10		
Butane-2-on	CAS 78-93-3	450	900	
Propane-2-ol	CAS 67-63-0	900	1200	
Benzoate	CAS 3734-33-6	0.1		

Typical DNEL values for workers and consumers:

ETHANOL

DNEL value - employees Long-term exposure - systemic impact:

- Skin DNEL 343mg/kg

- Respiratory DNEL 950 mg/m³

Short-term exposure - systemic impact:

- Skin DNEL 1900 mg/kg

DNEL value - employees

- Long-term exposure systemic impact:
- Skin DNEL 206mg/kg
- Respiratory DNEL 114 mg/m³
- Oral DNEL 87 mg/kg
- Short-term exposure systemic impact:
- Skin DNEL 950 mg/kg
- Respiratory DNEL 950 mg/m³

Predicted no-effect concentration (PNEC)

PNEC water (fresh water)	0.96 mg/l
PNEC water (sea water)	0.79 mg/l
PNEC deposits (fresh water)	3.5 mg/kg of dry deposit
PNEC soil	0.63 mg/kg dry soil
PNEC treatment plant	580 mg/l
8.2. Exposure controls	

Proper technical control measures

Prevent exceeding normative concentrations of ingredients that cause a hazard in the work environment. Explosion-proof equipment

Personal precautions

Use tight protective goggles or face screens - PN-EN 166.

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Hand protection:
Product to be used on the skin of hands
Skin protection:
Protective clothing made of dense textiles, protective shoes
Respiratory tract protection
Respiratory tract protection under normal conditions is not required. In the case of hazard in the atmosphere containing substance vapors, use protective equipment with independent air circulation.
Respiratory tract protection
with filters consistent with PN-EN 149: 2001
Exposure controls
Ethanol is fully biodegradable in the environment.

SECTION 9: Physical and chemical properties

9.1.	Information on basic physical and chemical properties				
	a) Appearance:	colorless gel			
	b) Odor:	Typical for ethyl alcohol			
	c) Odor threshold:	No data			
	d) pH value:	No data			
	e) Melting point/freezing point:	No data			
	f) Initial boiling point and boiling range:	78.1 °C			
	g) Flash point:	No data			
	h) Evaporation rate:	Not determined.			
	i) Flammability (solid, gas):	Not applicable to liquid			
	j) Upper/lower flammability limits:	No data			
	k) Vapor pressure:	No data			
	I) Vapor density	No data			
	m) Relative density:	820-860 kg/m³ /20ºC			
	n)Solubility:	not applicable			
	o) Partition coefficient:	No data			
	(n-octanol/water)				
	p) Auto-ignition temperature	No data			
	q) Decomposition temperature:	Not determined			
	r) Viscosity:	No data			
	s) Explosive properties:	No data			
		No data			
	t) Oxidizing properties:				
9.2.	Other information				
		None			

SECT	SECTION 10: Stability and reactivity		
10.1.	Reactivity		
	Under normal conditions, the mixture is chemically stable.		
10.2.	Chemical stability		
	Under normal storage and use conditions, the mixture is chemically stable.		
10.3.	Possibility of hazardous reactions		
	Unknown		
10.4.	Conditions to avoid		
	Avoid contact with strong heat sources, e.g. sunlight and flames.		
10.5.	Incompatible materials		
	Avoid contact with strong oxidants, strong acids, strong alkalies, acyl chlorides, reducing agents and		

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ammonia.

10.6. Hazardous decomposition products Not applicable is following the guidelines.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Ethanol is easily absorbed orally and by inhalation. It is transported to all tissues and organs, immediately detoxified and released. In the case of exposure typical for standard respiratory track exposure, a metabolic process of alcohol dehydrogenase is initiated and saturation is prevented. Ethanol does not accumulate in the body. Transdermal absorption is very low.

Ethyl alcohol CAS 64-17-5

LD50 – oral, rat 7060 mg/kg LC50 – inhalation, mice 39 mg/kg (4h) LC50 – inhalation, rat 20000 ppm (10h) LD50 – oral, mice 345 mg/kg LD50 – oral, rabbit 6300 mg/kg DLLO – oral, child 2000 mg/kg DLLO – oral, human male 700 mg/kg DLLO – oral, human 1400 mg/kg

Methyl ethyl ketone CAS 78-93-3

LD50 – oral rat 2737 mg/kg LD50 – skin rabbit 13000 mg/kg LC50 – inhalation rat 6000 mg/ m3 (4h) TCL0 – inhalation, human 300 mg/ m3

Denathonium benzoate

LD50 – oral, rat 580 mg/kg

CAS 3734-33-6

Skin corrosion/ irritation effect:

Skin irritation. Results of tests conducted for 4 hours show no irritation effect in humans and animals. In people with repeated dose, no irritation effect is shown in the case of exposure repeated for the period of 12 hours.

Eye corrosion/ irritation effect:

Eye irritation. Tests conducted in accordance with OECD guidelines 405, medium eye irritation, the effect withdraws in 8 to 14 days.

Respiratory tract irritation effect:

The classification criteria have not been met.

Skin or respiratory tract sensitization:

The classification criteria have not been met.

Germ cell mutagenicity:

Genetic toxicity: negative result.

The substance tested was not genotoxic in in-vitro tests using cells of humans, rodents and bacteria, or in-vitro tests in mice. Therefore, there is no need to classify ethanol with regard to its mutagenic effect, in accordance with 1272/2008/EC.

Carcinogenicity:

Rat NOAEL > 3000mg/kg mg/kg Mice: females NOAEL > 4400, males > 4250mg/kg

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	There is no evide	g/kg on the basis of simule ence of carcinogenic effe ack of carcinogenic poten	ect so far. There is no nee	ed to classify and mark the		
	emergence of feta physical and ment any exposure to e dose, which could	g (mice, oral) inhalation) icity - inhalation: day (oral) (inhalation) ed alcohol consumption du al alcohol syndrome, which al defects. There is no evit	idence that complications of ct consumption. It is not po	n at birth and may result in this type could be caused by ssible to achieve an ethanol		
	Specific target organ toxicity - repeated exposure: None.					
	Complications: Potential impairment of fertility.					
	Symptoms related to physical, chemical and toxicological properties: Consumption may result in nausea, vomiting, euphoria. Upon absorption of larger quantities: vertigo, intoxication, sedation, paralysis of respiratory track. If inhaled: irritation of mucous membranes In contact with eyes: surface irritation.					
SECT	ION 12: Ecological	information				
12.1.	Toxicity					
	Acute toxicity to Ethanol CAS & CLO – fish (leucis CLO50 – fish (leucis CE50 – invertebr CE50 – invertebr		= 8140mg/l (48 hours) > 10000 mg/l (24h) = 7750mg/l (96h)			
12.2.	Persistence and c Easily biodegradat					
12.3.	Bioaccumulative The mixture is not	potential subject to bioaccumulatior	n. logKow<4.5			
12.4.			ject to quick dispersion. Upo nd soluble in water. It is poo	n release to soil, the product rly absorbed by soil.		
12.5.		I vPvB assessment not meet the PBT or vPvB	classification criteria accord	ing to annex XIII to		

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12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste neutralization methods

Product waste: contact the manufacturer to determine the possibilities of waste processing. If there is no such possibility, transfer the product for disposal by a plant licensed for collection, transport, recovery or neutralization of waste.

The waste code is assigned individually in the place, in which it was generated:

02 07 02 Spirit distillation waste

02 07 03 Chemical process waste.

Used packaging removal: burning on the ground level is prohibited. Empty product containers may contain flammable vapors causing an explosion hazard. Reusable containers can be used after cleaning.

Waste code:

15 01 02 Plastic packaging

15 01 04 Metal packaging

15 01 07 Chemical process waste

Basis: Act of 14.12.2012 on waste (Journal of Laws of 2013 item 21)

SECTION 14: Transport information				
		ADR/RID	IMGD	ΙΑΤΑ
14.1.	UN number	1170	1170	1170
14.2.	UN proper shipping name	ETH	IANOL (Ethyl alcoh	ol)
14.3.	Transport hazard class	3	3	3
	Classification code	F1	F1	F1
	Warning label no. 3			
		3		
		Ĭ	, i	, i
14.4	Packaging group			
	Environmental hazards	not	F-E , S-D	not
14.6.	Special precautions for users			
	not applicable			
14.7.	Transport in bulk according to appendix II	to MARPOL conve	ention and IBC code	e
		3		
	Warning label			
	no. 3			
	Packaging group			
	I			

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Safety data sheet has been developed on the basis of:

Commission Regulation (EC) No 2015/830 of 28.2015; amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), as amended.

Regulation (EC) No 1272/2008 of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Act on substances and mixtures of substances of 25.02.2011 (Journal of Laws 63 item 322).

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	e Minister of Health of April 20 nixtures and some mixtures (Jo		ackaging of hazardous substances tem 445), as amended.		

Regulation of the Minister of Health 12.01.2015 on the criteria and mode of classification of chemicals and their mixtures (Journal of Laws of 2015, item 2018).
Regulation of the Minister of Labor and Social Policy of June 6th, 2014, on maximum permissible concentration and intensity of harmful factors in the work environment (Journal of Laws of 2018, item 1286). Act of 14.12.2012 on waste (Journal of Laws of 2013 item 21).
Act of 13.06.2013 on packaging and packaging waste (Journal of Laws of 2013, item 888)
Regulation of the Minister of the Environment of 26 January 2010 on references for some substances in the air (Journal of Laws of 2010 no. 16 item 87).
Classification of hazardous materials in accordance with the European Agreement concerning the international carriage of dangerous goods by road (ADR)
Regulation of the Minister of Labor and Social Policy of 26.09.1997 on general provisions on occupational health and safety. (Journal of Laws of 2003 no. 169 item 1650) as amended.
Regulation of the Minister of Health of December 30th, 2004 on occupational health and safety associated with presence of chemical agents in the work environment (Journal of Laws of 2005 no. 11 item 86 as amended).

Act of 19.08.2011 on transport of hazardous goods (Journal of Laws of 2011 no. 227 item 1454).

Regulations for International Transport of Hazardous Goods by Railway (Journal of Laws of 2011 no. 137, item 804 804),

European Agree (annex to Journal of Laws of 2013 no. 0 item 815).

Government Statement of March 26th, 2015 on coming into force of amendments to appendices A and B to the European Agreement concerning the international carriage of dangerous goods by road (ADR), prepared in Geneva on September 30th, 1957 (Journal of Laws of 2013 no. 0 item 815).

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the substance.

SECTION 16: Other information

Meaning of hazard statements from section: 3

H225 Highly flammable liquid and vaporsH319 Eye irritant.

Flam. Liq. 2 Highly flammable liquid, hazard category 2. Eye Irrit. 2 Eye irritation, hazard category 2.

Recommended limitations to use:

Product designated solely for professional use

Training advice

Before use, please read the safety data sheet, which has been prepared on the basis of information supplied by manufacturers of products and domestic legislation in force as of the date of preparation of the sheet. Persons coming into contact with the product should be trained before commencement of work with regard to the properties and modes of use of the product.

Explanation of abbreviations and acronyms used in the safety data sheet

CAS (Chemical Abstracts Service)

WE number means one of the following three numbers:

- number assigned to substance in the European Inventory of Existing Commercial Chemical Substances (EINECS)
 - number assigned to substance on the European List of Notified Substances (Elincs)

number in the inventory of chemical substances listed in the publication of the European Commission "No-longer polymers" **NDS** - maximum permissible concentration of substances harmful to health in the work environment

NDSCh - short-term exposure limit

NDSP - ceiling exposure limit

DSB – permissible concentration in biological material

DGW – lower explosive limit

GGW – upper explosive limit

PBT – persistence, bioaccumulation and toxicity

vPvB – very high persistence and very high bioaccumulation ability

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UN number - Material identification number

ADR - European Agreement concerning the international carriage of dangerous goods by road

IMO - International Maritime Organization

RID - regulations for international transport of hazardous goods by railway

IMDG - international maritime code of dangerous goods

ICAO - Technical Instructions on Safe Air Carriage of Dangerous Goods

Other information:

The product described in the safety data sheet should be stored and used in accordance with good manufacturing practice and in accordance with all legal provisions in force.

Information contained in the safety data sheet, based on the current state of knowledge, is aimed at describing the product from the perspective of legislation on safety, health and environmental protection. It should not be understood as a warranty of specific properties.

The user is responsible for establishing the conditions for safe use of the product and for the effects of improper use of the product.