

Safety Data Sheet

according to Regulation (EC) No 1907/2006

NORD-TEST Food Penetrant

Revision date: 08.06.2023

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

NORD-TEST Food Penetrant

Further trade namesArticle no. (user):
124.000.102

UFI: XGVN-JXDF-G5FK-8KA0

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

Inspection of metals

1.3. Details of the supplier of the safety data sheet

Company name:	Helling GmbH	
Street:	Spoekerdamm 2	
Place:	D-25436 Heidgraben	
Telephone:	+49-4122-922-0	Telefax: +49-4122-922-201
E-mail:	info@helling.de	
Internet:	www.helling.de	

1.4. Emergency telephone number: Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**Flam. Liq. 3; H226
Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements**Regulation (EC) No 1272/2008****Signal word:** Warning**Pictograms:****Hazard statements**H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.**Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

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P501

Dispose of contents/container to industrial incineration plant.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Aqueous suspension with inert content and the following components:

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
64-17-5	ethanol, ethyl alcohol			15 - 20 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
64-17-5	200-578-6	ethanol, ethyl alcohol	15 - 20 %
	inhalation: LC50 = 95,6 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 10470 mg/kg		

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Remove casualty to fresh air and keep warm and at rest.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

In case of troubles or persistent symptoms consult doctor.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting.

In case of troubles or persistent symptoms consult doctor.

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

Signs of eye or skin irritation: burning, redness, swelling.

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**Atomized water. Carbon dioxide (CO₂), Foam, Extinguishing powder.

Co-ordinate fire-fighting measures to the fire surroundings.

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Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air.

In case of fire in the surroundings the formation of dangerous gases/vapour is possible too.

In case of fire may be liberated: Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Avoid direct contact by a safety distance or wearing of suitable protective equipment.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

See protective measures under point 7 and 8.

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

6.3. Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Avoid contact with skin, eyes and clothes.

High slip hazard because of leaking or spilled product.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep/Store only in original container. Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

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7.3. Specific end use(s)

In case of special use, contact supplier.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
64-17-5	ethanol, ethyl alcohol			
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day
Consumer DNEL, acute		inhalation	local	950 mg/m³
Consumer DNEL, long-term		inhalation	systemic	114 mg/m³
Worker DNEL, acute		inhalation	local	1900 mg/m³
Worker DNEL, long-term		inhalation	systemic	950 mg/m³
56-81-5	Glycerin			
Worker DNEL, long-term		inhalation	local	56 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
64-17-5	ethanol, ethyl alcohol	
Freshwater		0,96 mg/l
Marine water		0,79 mg/l
Freshwater sediment		3,6 mg/kg
Marine sediment		2,9 mg/kg
Micro-organisms in sewage treatment plants (STP)		580 mg/l
Soil		0,63 mg/kg

8.2. Exposure controls



Appropriate engineering controls

See protective measures under point 7 and 8.

Provide adequate ventilation. Provide adequate ventilation as well as local exhaust at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

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Hand protection

Suitable gloves type NBR (Nitrile rubber).

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protect skin by using skin protective cream.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Respiratory protection necessary at: generation/formation of aerosols

Respiratory protection is required in case of exceeding exposure limit values.

half-mask with filter (DIN EN 149). Filter type: A (colour: brown)

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:	colourless	
Odour:	like: Alcohol	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not applicable
		not applicable
Lower explosion limits:		3,5 vol. %
Upper explosion limits:		15,0 vol. %
Flash point:		< 60 °C
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic:		not determined
Water solubility:		practically insoluble
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		not determined
Density (at 20 °C):		1,1 - 1,3 g/cm ³
Relative vapour density:		not determined

9.2. Other information**Information with regard to physical hazard classes****Explosive properties**

Vapours can form explosive mixtures with air.

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

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Viscosity / dynamic:

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

Oxidizing agents, strong. Strong acid

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

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

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64-17-5	ethanol, ethyl alcohol				
	oral	LD50 10470 mg/kg	Rat	IUCLID	
	dermal	LD50 > 2000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 95,6 mg/l	Rat	RTECS	

Irritation and corrosivity

Causes serious eye irritation.

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.

11.2. Information on other hazards

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Endocrine disrupting properties

see section 12

SECTION 12: Ecological information**12.1. Toxicity**

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

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64-17-5	ethanol, ethyl alcohol					
	Acute fish toxicity	LC50 mg/l	8140	96 h	Leuciscus idus (golden orfe)	
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris	
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna	IUCLID

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

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

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number or ID number:**

UN 1170

14.2. UN proper shipping name:

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

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14.3. Transport hazard class(es):

3

14.4. Packing group:

III

Hazard label:

3



Classification code:

F1

Special Provisions:

144 601

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

30

Tunnel restriction code:

D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:

UN 1170

14.2. UN proper shipping name:

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es):

3

14.4. Packing group:

III

Hazard label:

3



Classification code:

F1

Special Provisions:

144 601

Limited quantity:

5 L

Excepted quantity:

E1

Marine transport (IMDG)

14.1. UN number or ID number:

UN 1170

14.2. UN proper shipping name:

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es):

3

14.4. Packing group:

III

Hazard label:

3



Special Provisions:

144, 223

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:

UN 1170

14.2. UN proper shipping name:

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es):

3

14.4. Packing group:

III

Hazard label:

3



Special Provisions:

A3 A58 A180

Limited quantity Passenger:

10 L

Passenger LQ:

Y344

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Excepted quantity:	E1	
IATA-packing instructions - Passenger:		355
IATA-max. quantity - Passenger:		60 L
IATA-packing instructions - Cargo:		366
IATA-max. quantity - Cargo:		220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

2010/75/EU (VOC): 17 %

2004/42/EC (VOC): 17 %

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

section 1, 9, 11, 12, 14, 15, 16

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Abbreviations and acronyms

CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern
Flam. Liq: Flammable liquids
Eye Irrit: Eye irritation

Key literature references and sources for data

General review and adaption to regulation (EC) 2020/878

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)