according to Regulation (EC) No 1907/2006

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

1.1. Product identifier

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

Use of the substance/mixture

Debonding agent for all super glues

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: Hepf GmbH Street: Dorf 69

Place: A-6342 Niederndorf
Telephone: +43 5373 570033
e-mail: info@hepf.at
Contact person: Stefan Thaler

e-mail: Stefan.Thaler@hepf.at

Internet: www.hepf.at

Chemieberatung GmbH Tel.: +49(0)251/394868-69 Raesfeldstr. 22 www.tge-consult.de

D-48149 Münster

1.4. Emergency telephone

number:

Vergiftungsinformationszentrale (VIZ) Wien: +43 (0) 1 406 43 43

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

acetone; propan-2-one; propanone **Signal word:**Danger

Pictograms:





Hazard statements

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

according to Regulation (EC) No 1907/2006

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Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 Keep container tightly closed.

P271 Use only outdoors or in a well-ventilated area. P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container to local/regional/national/international regulations.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:





Hazard statements

H336

Precautionary statements

P101-P102-P233-P271-P405-P501

2.3. Other hazards

In use, may form flammable/explosive vapour-air mixture.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	GHS Classification					
67-64-1	acetone; propan-2-one; propanone					
	200-662-2	606-001-00-8				
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066					
106-20-7	Bis(2-ethylhexyl)amine			<1 %		
	203-372-4					
	Acute Tox. 3, Acute Tox. 3, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Aquatic Chronic 1; H331 H311 H302 H314 H318 H410					

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

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data

according to Regulation (EC) No 1907/2006

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sheet if possible). Take off immediately all contaminated clothing.

First aider: Pay attention to self-protection!

After inhalation

Remove person to fresh air and keep comfortable for breathing. In case of respiratory tract irritation, consult a physician.

After contact with skin

Take off immediately all contaminated clothing. Wash with plenty of water. In case of skin irritation, seek medical treatment.

After contact with eyes

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

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam.

In case of major fire and large quantities: Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO2).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.

Additional information

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

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove persons to safety. Remove all sources of ignition. Ventilate affected area.

Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.

Wear personal protection equipment. (See section 8.)

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Danger of explosion! Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area.

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

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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

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

Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.

Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Flammable vapours can accumulate in head space of closed systems. In use, may form flammable/explosive vapour-air mixture. Heating causes rise in pressure with risk of bursting.

Further information on handling

General protection and hygiene measures: See section 8.

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 against direct sunlight.

Ensure adequate ventilation of the storage area.

Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Hints on joint storage

Do not store together with: Gas. Explosives. Flammable solids. Pyrophoric liquids and solids. Self-heating substances and mixtures. Substances and mixtures which, in contact with water, emit flammable gases. Oxidizing liquids. Oxidizing solids. ammonium nitrate. Self-reactive substances and mixtures. Organic peroxides. Non-combustible toxic substances. Radioactive substances. Infectious substances.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.

Protect against: UV-radiation/sunlight. heat. Humidity frost.

storage temperature: 15-25°C

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL

8.2. Exposure controls









Appropriate engineering controls

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

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Protective and hygiene measures

The usual precautions for handling chemicals should be considered.

Keep away from food, drink and animal feedingstuffs.

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Protect skin by using skin protective cream. Take off contaminated clothing and wash it before reuse.

Eye/face protection

Recommended eye protection brand: Tightly sealed safety glasses. (DIN EN 166)

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves.

Suitable material: Butyl rubber.
Thickness of glove material: 0,5 mm

Breakthrough time >= 480 min. penetration time (maximum wearing period): ~ 120 min. (estimated)

In the case of wanting to use the gloves again, clean them before taking off and air them well. Before using check leak tightness / impermeability.

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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin protection

Wear fire/flame resistant/retardant clothing.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

Generation/formation of aerosols

exceeding exposure limit values

Insufficient ventilation.

Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type: A/P1-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

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: viscous, fluid

Colour: pink

Odour: characteristic

pH-Value: not determined

Changes in the physical state

Melting point:
Initial boiling point and boiling range:

56 °C
Flash point:

-20 °C

Explosive properties

In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits: 2,6 vol. %

according to Regulation (EC) No 1907/2006

	according to Regulation (EC) No 1907/2000	
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Upper explosion limits:	12,8 vol. %	
Ignition temperature:	not determined	
Decomposition temperature:	not determined	
Oxidizing properties none.		
Vapour pressure: (at 20 °C)	245 hPa	
Density:	0,8 g/cm³	
Water solubility:	miscible.	
Solubility in other solvents not determined		
Partition coefficient:	not determined	
Viscosity / dynamic: (at 40 °C)	500 mPa⋅s	
Viscosity / kinematic: (at 20 °C)	not determined	
Flow time:	not determined	
Vapour density:	not determined	
Evaporation rate:	not determined	
Solvent separation test:	not determined	
Solvent content:	not determined	
9.2. Other information		
Solid content:	not determined	

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard!

In use may form flammable/explosive vapour-air mixture.

Heating causes rise in pressure with risk of bursting.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong. Strong acid. strong alkalis.

10.6. Hazardous decomposition products

Can be released in case of fire: Gas/vapours, irritant. Carbon monoxide Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No data available.

Acute toxicity

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

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CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
67-64-1	acetone; propan-2-one; p	oropanone					
	oral	LD50 mg/kg	5800	Rat	ECHA Dossier		
	dermal	LD50 mg/kg	7400	Rabbit	ECHA Dossier		
	inhalation (4 h) vapour	LC50	50,1 mg/l	Rat	RTECS		
106-20-7	Bis(2-ethylhexyl)amine						
	oral	ATE mg/kg	500				
	dermal	ATE mg/kg	300				
_	inhalation vapour	ATE	3 mg/l				
	inhalation aerosol	ATE	0,5 mg/l				

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

May cause drowsiness or dizziness. (acetone; propan-2-one; propanone)

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

Aspiration hazard

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

Specific effects in experiment on an animal

No data available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
67-64-1	acetone; propan-2-one; propanone						
	Acute fish toxicity	LC50 mg/l	5540		Onchorhynchus mykiss	ECHA Dossier	
	Acute crustacea toxicity	EC50 mg/l	8800	48 h	Daphnia pulex	ECHA Dossier	

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation	-	-	
67-64-1	acetone; propan-2-one; propanone			
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C	90	28	ECHA Dossier
	Product is biodegradable.			

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12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-64-1	acetone; propan-2-one; propanone	-0,24

12.4. Mobility in soil

No data available.

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.

12.6. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process. Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08);

waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent

mixtures; hazardous waste

Waste disposal number of used product

140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08);

waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent

mixtures; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1090

14.2. UN proper shipping name: ACETONE, solution

14.3. Transport hazard class(es):314.4. Packing group:IIHazard label:3



Classification code:

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according to Regulation (EC) No 1907/2006			
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Limited quantity: Excepted quantity: Transport category: Hazard No: Tunnel restriction code:	1 L E2 2 33 D/E		
Inland waterways transport (ADN)			
14.1. UN number:	UN 1090		
14.2. UN proper shipping name:	ACETONE, solution		
14.3. Transport hazard class(es):	3		
14.4. Packing group:	II		
Hazard label:	3		
Classification code:	F1		
Limited quantity:	1 L E2		
Excepted quantity:	EZ		
Marine transport (IMDG)	UN 1090		
14.1. UN number:	ACETONE, solution		
14.2. UN proper shipping name: 14.3. Transport hazard class(es):	3		
14.4. Packing group:	II		
Hazard label:	3		
riazaru iabei.	3		
Marine pollutant:	NO		
Special Provisions: Limited quantity:	- 1 L		
Excepted quantity:	E2		
EmS:	F-E, S-D		
Air transport (ICAO-TI/IATA-DGR)			
14.1. UN number:	UN 1090		
14.2. UN proper shipping name:	ACETONE, solution		
14.3. Transport hazard class(es):	3		
14.4. Packing group:	II		
Hazard label:	3		
	3		
Limited quantity Passenger:	1 L		
Passenger LQ:	Y341		
Excepted quantity:	E2		
IATA may quantity Passanger:	353 5 L		

IATA-max. quantity - Cargo: **14.5. Environmental hazards**

IATA-max. quantity - Passenger:

IATA-packing instructions - Cargo:

5 L

364

60 L

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ENVIRONMENTALLY HAZARDOUS:

14.6. Special precautions for user

See section 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant.

SECTION 15: Regulatory information

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

no

EU regulatory information

2010/75/EU (VOC): 99,76 % (798,08 g/l) 2004/42/EC (VOC): not determined

Information according to 2012/18/EU P5c FLAMMABLE LIQUIDS

(SEVESO III):

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

REACH 1907/2006 Appendix XVII, No (mixture): 3, 40

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

SECTION 16: Other information

Changes

Rev. 1.00; Initial release: 21.06.2019

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

CAS Chemical Abstracts Service DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level

NTP: National Toxicology Program

N/A: not applicable

OSHA: Occupational Safety and Health Administration

PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic

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RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

SVHC: substance of very high concern TRGS Technische Regeln fuerGefahrstoffe TSCA: Toxic Substances Control Act VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe

WGK: Wassergefaehrdungsklasse

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

	3 · · · · · · · · · · · · · · · · · · ·				
Classification	Classification procedure				
Flam. Liq. 2; H225	On basis of test data				
Eye Irrit. 2; H319	Calculation method				
STOT SE 3; H336	Calculation method				

Re

Irrit. 2; H319		Calculation method
T SE 3; H336		Calculation method
elevant H and EUH statements (number and full text)		(number and full text)
H225 Highly		flammable liquid and vapour.
H302 Harmful if swallowed.		ul if swallowed.
H311	Toxic in	a contact with skin

H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:

Health hazards: Calculation method. Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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