1. Identification

Product identifier

EP150

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Adhesives, sealants

Details of the supplier of the safety data sheet

Company name:	Hottinger Brüel & Kjaer
Street:	Im Tiefen See 45
Place:	D-64293 Darmstadt
Telephone:	+49 (0)6151 803-0
Internet:	www.hbm.com
Responsible Department:	+49(0)6131 19240 support@hbm.com

Emergency phone number: +49-30-18412-0

2. Hazard(s) identification

Classification of the chemical

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225
Skin Irrit. 2; H315
Eye Irrit. 2; H319
Skin Sens. 1; H317
STOT SE 3; H336
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

Label elements

Regulation (EC) No 1272/2008

Signal word: Danger

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapor
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H412	Harmful to aquatic life with long lasting effects

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Special labelling of certain mixtures

Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:

Hazard statements

H317-H412

Precautionary statements

P261-P280

Hazards not otherwise classified

No information available.

3. Composition/information on ingredients

Mixtures

Hazardous components

CAS No	Components	Quantity
78-93-3	butanone; ethyl methyl ketonebutanone; ethyl methyl ketone	35 - < 40 %
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	20 - < 25 %
123-42-2	4-hydroxy-4-methylpentan-2-one; diacetone alcohol	15 - < 20 %
1330-20-7	xylene	10 - < 15 %
80-08-0	dapsone; 4,4'-diamino diphenyl sulfone	5 - < 10 %

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Components	Quantity
	Specific Conc. Limits, M-factors and ATE		
25068-38-6	500-033-5	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	20 - < 25 %
	Skin Irrit. 2; H315: >= 5 - 100 Eye Irrit. 2; H319: >= 5 - 100		
123-42-2	204-626-7	4-hydroxy-4-methylpentan-2-one; diacetone alcohol	15 - < 20 %
	dermal: LD50 = 13630 mg/kg; oral: LD50 = 2520 mg/kg Eye Irrit. 2; H319: >= 10 - 100		
1330-20-7	215-535-7	xylene	10 - < 15 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg		
80-08-0	201-248-4	dapsone; 4,4'-diamino diphenyl sulfone	5 - < 10 %
	oral: ATE = 500 mg/kg		

Further Information

No information available.

4. First-aid measures

Description of first aid measures

General information

Remove affected person from the danger area and lay down. If unconscious but breathing normally, place in recovery position and seek medical advice. First aider: Pay attention to self-protection!

After inhalation

Provide fresh air.

If experiencing respiratory symptoms: Call a doctor.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

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. Call a doctor if you feel unwell.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2) Extinguishing powder, Foam

Unsuitable extinguishing media

Full water jet

Specific hazards arising from the chemical

Highly flammable Vapors may form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

Self-contained respirator (breathing apparatus) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.
Full protection suit

Additional information

Use water spray/stream to protect personnel and to cool endangered containers.
Supress gases/vapors/mists with water spray jet.
Do not empty into drains.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition.
Do not breathe gas/fume/vapor/spray. Avoid contact with skin, eyes and clothes.
Use personal protection equipment.

For non-emergency personnel

Remove persons to safety.

For emergency responders

First aider: Pay attention to self-protection!

Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

Methods and material for containment and cleaning up

For cleaning up

Take up mechanically, placing in appropriate containers for disposal.

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.

Reference to other sections

Safe handling: see section 7
Wear personal protection equipment (refer to section 8).
Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapor/spray.

Advice on protection against fire and explosion

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

Further information on handling

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

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and in a well-ventilated place.
Do not allow to enter into surface water or drains.
Do not allow uncontrolled discharge of product into the environment.

Hints on joint storage

Do not store together with: Oxidizing agent, strong , Combustible substances of acute toxicity, category 1 and 2 / very toxic substances Non-combustible substances of acute toxicity, category 1 and 2 / very toxic substances

Further information on storage conditions

Keep container tightly closed in a cool, well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No	Substance	ppm	mg/m³	f/cc	Category	Origin
78-93-3	2-Butanone (Methyl ethyl ketone)	200	590		TWA (8 h)	PEL
78-93-3	2-Butanone	200	590		TWA (8 h)	REL
		300	885		STEL (15 min)	REL
123-42-2	Diacetone alcohol (4-Hydroxy-4-methyl-2-pentanone)	50	240		TWA (8 h)	PEL
123-42-2	Diacetone alcohol	50	240		TWA (8 h)	REL
1330-20-7	Xylenes (o-,m-,p-isomers)	100	435		TWA (8 h)	PEL

Additional advice on limit values

No information available.

Exposure controls





Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.
In use, may form flammable/explosive vapor-air mixture.
Use explosion-proof electrical equipment.

Use only non-sparking tools.

Protective and hygiene measures

When using do not eat or drink.
Do not breathe gas/fume/vapor/spray.
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.
Wear suitable protective clothing, gloves and eye/face protection.
Draw up and observe skin protection programme.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. EN ISO 374
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.
Thickness of the glove material: >= 0,7mm
Suitable gloves type NBR (Nitrile rubber)
Breakthrough time::>480 min
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.

Skin protection

Used working clothes should not be worn outside the work area.
Separate storage of work clothes.
Wear anti-static footwear and clothing

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Filtering device (full mask or mouthpiece) with filter: a
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow to enter into surface water or drains.
The vapors are heavier than air and can accumulate in high concentrations on the ground, in cavities, channels and cellars.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid	
Color:	transparent	
Odor:	Adhesives, sealants	
pH-Value:		not determined
Changes in the physical state		
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		80 °C
Sublimation point:		not determined
Softening point:		not determined
Pour point:		not determined
not determined:		
Flash point:		-4 °C

Sustaining combustion:	No data available

Flammability

Solid/liquid:	not applicable

Explosive properties

Es liegen keine Informationen vor.

Lower explosion limits:	0,7 vol. %
Upper explosion limits:	11,5 vol. %
Auto-ignition temperature:	465 °C

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Nicht brandfördernd.

Vapor pressure: (at 20 °C)	8 hPa
Vapor pressure: (at 50 °C)	9 hPa
Density (at 20 °C):	0,934 g/cm³
Bulk density:	not determined
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

nicht bestimmt

Partition coefficient n-octanol/water:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Flow time:	not determined
Relative vapour density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	69,50 %

Other information

Solid content:	not determined

10. Stability and reactivity

Reactivity

Highly flammable

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

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

Incompatible materials

No information available.

Hazardous decomposition products

No known hazardous decomposition products.

Further information

No information available.

11. Toxicological information

Information on toxicological effects

Acute toxicity

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

ATEmix calculated

ATE (oral) 8333 mg/kg; ATE (dermal) 8462 mg/kg; ATE (inhalation vapour) 84,62 mg/l; ATE (inhalation dust/mist) 11,54 mg/l

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
123-42-2	4-hydroxy-4-methylpentan-2-one; diacetone alcohol				
	oral	LD50 2520 mg/kg	Rat		
	dermal	LD50 13630 mg/kg	Rabbit		
1330-20-7	xylene				
	dermal	ATE 1100 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
80-08-0	dapsone; 4,4'-diamino diphenyl sulfone				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Causes skin irritation

Causes serious eye irritation

Sensitizing effects

May cause an allergic skin reaction (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700))

Carcinogenic/mutagenic/toxic effects for reproduction

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

Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness (butanone; ethyl methyl ketonebutanone; ethyl methyl ketone)

Specific target organ toxicity (STOT) - repeated exposure

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

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): Xylenes (CAS 1330-20-7) is listed in group 3. Dapsone (CAS 80-08-0) is listed in group 3.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

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

Specific effects in experiment on an animal

No information available.

Additional information on tests

No information available.

Practical experience

No information available.

Information on other hazards

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.

Other information

No information available.

Further information

No information available.

12. Ecological information

Ecotoxicity

No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

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.

Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains.

13. Disposal considerations

Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled.

14. Transport information

US DOT 49 CFR 172.101

UN number or ID number:	UN 1133
Proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	III
Hazard label:	3

Marine transport (IMDG)

UN number:	UN 1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	III
Hazard label:	3

Special Provisions:	223 955
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

UN number:	UN 1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	III
Hazard label:	3

Special Provisions:	A3
Limited quantity Passenger:	10 L
Passenger LQ:	Y344
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

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National regulatory information

SARA Section 304 CERCLA:

Methyl ethyl ketone (78-93-3): Reportable quantity = 5,000 (2270) lbs. (kg)

Xylene (mixed isomers) (1330-20-7): Reportable quantity = 100 (45.4) lbs. (kg)

SARA Section 311/312 Hazards:

Methyl ethyl ketone (78-93-3): Fire hazard, Immediate (acute) health hazard

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) (25068-38-6): Immediate (acute) health hazard
4-hydroxy-4-methylpentan-2-one; diacetone alcohol (123-42-2): Immediate (acute) health hazard
Xylene (mixed isomers) (1330-20-7): Fire hazard, Immediate (acute) health hazard
dapsone; 4,4'-diamino diphenyl sulfone (80-08-0): Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:
Xylene (mixed isomers) (1330-20-7): De minimis limit = 1.0 %, Reportable threshold = Standard

Clean Air Act Section 112(b):
Methyl ethyl ketone (78-93-3), Xylene (mixed isomers) (1330-20-7)

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other information

Changes

Revision date: 02/11/2024

Revision No: 2,1

This data sheet contains changes from the previous version in section(s): 6.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H statements (full text)

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
EUH066	Repeated exposure may cause skin dryness or cracking.

Other data

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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)