

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

TIP TOP ADHESIVE CHEMO 8 SOLUTION

Revision date: 11.03.2021

Product code: 00359-1231

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H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P260	Do not breathe vapour.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.

Special labelling of certain mixtures

EUH205	Contains epoxy constituents. May produce an allergic reaction.
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2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.
Vapours may form explosive mixture with air.

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

Preparation in organic solvents

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
	Reaction mass of ethylbenzene and xylene			< 55 %
	905-588-0		01-2119488216-32	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H332 H312 H315 H319 H335 H373 H304			
141-78-6	Ethyl acetate			< 30 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
25068-38-6	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)			< 2,5 %
	500-033-5	603-074-00-8	01-2119456619-26	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411			

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

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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
	905-588-0	Reaction mass of ethylbenzene and xylene	< 55 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg STOT RE 2; H373: >= 10 - 100	
141-78-6	205-500-4	Ethyl acetate	< 30 %
		dermal: LD50 = > 18000 mg/kg; oral: LD50 = 5620 mg/kg	
25068-38-6	500-033-5	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700)	< 2,5 %
		dermal: LD50 = 11400 mg/kg Skin Irrit. 2; H315: >= 5 - 100 Eye Irrit. 2; H319: >= 5 - 100	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
In the event of persistent symptoms receive medical treatment.
Take away from danger area and lay down affected person.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.
In the event of symptoms refer for medical treatment.

After contact with skin

Wash off immediately with soap and plenty of water.
Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Consult a physician.

After ingestion

Summon a doctor immediately.
Do not induce vomiting.
Induce vomiting only upon the advice of a physician.
Attention. Beware, danger of aspiration.

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

Harmful in contact with skin or if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide (CO₂), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet.



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5.2. Special hazards arising from the substance or mixture

Fire may produce:

Carbon monoxide, carbon dioxide, sulphur oxides and nitrogen oxides (NO_x).

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

Protective suit.

Additional information

Vapours are heavier than air and spread along ground.

The vapour/air mixture is explosive, even in empty, uncleaned receptacles.

Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ensure adequate ventilation.

Keep away sources of ignition.

Keep away noninvolved persons.

For non-emergency personnel

Avoid contact with skin, eyes and clothing.

Do not breathe vapours.

For emergency responders

In case of vapour formation use respirator.

Use personal protective clothing.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

Clean contaminated surface thoroughly.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Informations for disposal look up chapter 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed.

Use only in area provided with appropriate exhaust ventilation.

Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

Keep product and empty container away from heat and sources of ignition.

Pay attention to anti-explosion rules.

Do not smoke.

Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place.
Pay attention to anti-explosion rules.

Hints on joint storage

Incompatible with oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
141-78-6	Ethyl acetate	200	734		TWA (8 h)	
		400	1468		STEL (15 min)	
100-41-4	Ethylbenzene	100	442		TWA (8 h)	
		200	884		STEL (15 min)	
1330-20-7	Xylene, mixed isomers	50	221		TWA (8 h)	
		100	442		STEL (15 min)	

Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
100-41-4	Ethyl benzene	Mandelic acid and phenylglyoxylic acid	0.7 g/g	Creatinine	End of shift at end of workweek

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.
Pay attention to explosion protection rules.

Protective and hygiene measures

Do not inhale vapours.
Avoid contact with eyes and skin.
Wash hands before breaks and immediately after handling the product.
When using do not eat, drink or smoke.
Remove and wash contaminated clothes before re-use.

Eye/face protection

Eye wash bottle with pure water (EN 15154).
Tightly fitting goggles (EN 166).

Hand protection

Splash protection:
Protective gloves resistant to chemicals made off butyl, Minimum coat thickness 0,7 mm, Permeation resistance (wear duration) > 30 minutes, i.e. protective glove <Butoject 898> made by www.kcl.de.
This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.
Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the

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recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (DIN EN ISO 6530)

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

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

Physical state:	Highly viscous
Colour:	Transparent
Odour:	Aromatic

Test method

pH-Value:	n.d.
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Changes in the physical state

Melting point/freezing point:	n.d.
Boiling point or initial boiling point and boiling range:	> 76 °C
Sublimation point:	n.a.
Softening point:	n.d.
Flash point:	- 5 °C (Ethyl acetate)

Flammability

Solid/liquid:	n.a.
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Explosive properties

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Lower explosion limits:	1,2 vol. %
Upper explosion limits:	n.d.
Auto-ignition temperature:	> 430 °C

Self-ignition temperature

Solid:	n.a.
Gas:	n.a.

Decomposition temperature:	n.d.
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Oxidizing properties

Not oxidising.

Vapour pressure:	97 hPa
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Density (at 20 °C):	0,92 g/cm ³
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Bulk density:	n.a.
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Water solubility: (at 20 °C)	Immiscible
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Solubility in other solvents

n.d.

Partition coefficient n-octanol/water:	n.d.
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Viscosity / dynamic:	1250 +-250 mPa·s
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Viscosity / kinematic: (at 40 °C)	> 20,5 mm ² /s
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Flow time: (at 23 °C)	103 s 6 DIN EN ISO 2431
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Relative vapour density:	n.d.
Evaporation rate:	n.d.
Solvent separation test:	< 3 %
Solvent content:	< 80 %

9.2. Other information

No data available

SECTION 10: Stability and reactivity**10.1. Reactivity**

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with oxidising agents.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

Vapours may form explosive mixture with air.

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

No hazardous decomposition products known.

Fire may produce:

Carbon monoxide, carbon dioxide, sulphur oxides, and nitrogen oxides (NO_x).**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Harmful in contact with skin.

Harmful if inhaled.

No toxicological data available.

ATEmix calculated

ATE (inhalation dust/mist) 2,874 mg/l

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

Contains epoxy constituents. May produce an allergic reaction. 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.

STOT-single exposure

May cause respiratory irritation. (Reaction mass of ethylbenzene and xylene)

May cause drowsiness or dizziness. (Ethyl acetate)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (Reaction mass of ethylbenzene and xylene)

Aspiration hazard

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



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Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

11.2. Information on other hazards

Endocrine disrupting properties

No data available

Other information

Inhalation of vapours in high concentration can cause narcotic effects.

Inhalation of high vapour concentration may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Attention. Beware, danger of aspiration!

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

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.

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

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.

No data available

12.7. Other adverse effects

Hazard to waters.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

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Packaging that cannot be cleaned should be disposed of like the product.
Empty containers should be taken for local recycling, recovery or waste disposal.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1133
14.2. UN proper shipping name: Adhesives
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Limited quantity: 5 L / 30 kg
Excepted quantity: E1
Transport category: 3
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 1133
14.2. UN proper shipping name: Adhesives
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Limited quantity: 5 L / 30 kg
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 1133
14.2. UN proper shipping name: Adhesives
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Limited quantity: 5 L / 30 kg
Excepted quantity: E1
EmS: F-E, S-D

Other applicable information (marine transport)

Receptacle max. 450 L, IMDG Code subsection 2.3.2.2

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1133
14.2. UN proper shipping name: Adhesives

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14.3. Transport hazard class(es): 3**14.4. Packing group:** III

Hazard label: 3



Limited quantity Passenger: 10 L

Passenger LQ: Y344

Excepted quantity: E1

IATA-packing instructions - Passenger: 355

IATA-max. quantity - Passenger: 30 L

IATA-packing instructions - Cargo: 366

IATA-max. quantity - Cargo: 100 L

Other applicable information (air transport)

*) [3.3.3.1 IATA DGR]

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Maritime transport in bulk according to IMO instruments

The transport takes place only in approved and appropriate packaging.

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, Entry 75

2004/42/EC (VOC): < 85 %

Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,6,7,9,10,11,12,14.

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Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
IMDG = International Maritime Code for Dangerous Goods
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
MARPOL = International Convention for the Prevention of Pollution from Ships
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
CAS = Chemical Abstract Service
EN = European norm
ISO = International Organization for Standardization
DIN = Deutsche Industrie Norm
PBT = Persistent Bioaccumulative and Toxic
vPvB = Very Persistent and very Bio-accumulative
LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

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

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Acute Tox. 4; H312	Calculation method
Acute Tox. 4; H332	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
STOT SE 3; H336	Calculation method
STOT RE 2; H373	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H312+H332 Harmful in contact with skin or if inhaled.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.
EUH205 Contains epoxy constituents. May produce an allergic reaction.

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Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

"(n.a. = not applicable; n.d. = not determined)"

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