

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006

## Dipping hardener 952797

**SELEXION**

Update: 23.04.2017

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### Section 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier:** 952797  
**Commercial product name:** Dipping hardener
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
**Use of substance/preparation:** Surface hardening liquid for investment models
- 1.3 Manufacturer/distributor:** **CB Healthcare Consulting GmbH**  
Am Neumarkt 34 info@dehpbrand.com  
22041 Hamburg www.dehpbrand.com  
Germany Tel.: +49 (0)40 656680
- 1.4 Emergency telephone number:** INTERNATIONAL: +49 (0)6132 84463 -  
GBK GmbH (24h 7d/w - 365d/a)

### Section 2: Hazards identification

#### 2.1 Classification of the substance or mixture:

**Classification according to Directive 67/548/EEC or 1999/45/EC:**

**Precautionary statements:**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P280 Wear protective gloves/ eye protection/ face protection.  
P303 + P361 + P353  
IF ON SKIN (or hair): Take off immediately all contaminated clothing.  
Rinse skin with water/shower.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Classification according to Regulation (EC) No. 1272/2008 [CLP]:**

**Hazard statements:**

- H225 Highly flammable liquid and vapour.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.

#### 2.2 Label elements:

**Hazardous components which must be listed on the label:**

colophony

Signal word: danger

Pictograms: GHS02

GHS07



#### 2.3 Other hazards:

For Results of PBT and vPvB assessment see section 12.5.

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#### Section 3: Composition/information on ingredients

##### 3.2. Chemical characterization:

No information available.

##### Hazardous components:

EC-No.	Chemical name	Quantity
CAS-No.	Classification according to Directive 67/548/EEC	
Index-No.	Classification according to Regulation (EC) No.1272/2008 [CLP]	
REACH-No.		
<b>200-578-6</b>	<b>ethanol</b>	60%-90%
64-17-5	Flam. Liq.2, Eye Irrit.2 H225 H319	
603-002-00-5		
01-2119457610-43-XXX		
<b>232-475-7</b>	<b>colophony</b>	10%-40%
8050-09-7	Skin Sens.1 H317	
650-015-00-7		
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Full text of R-, H- and EUH-phrases: see section 16.

#### Section 4: First aid measures

##### 4.1 Description of first aid measures:

<b>General information:</b>	Remove from exposure, lie down. Take off all contaminated clothing immediately.
<b>After inhalation:</b>	Remove to fresh air. If symptoms persist, call a physician.
<b>After contact with skin:</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>After contact with eyes:</b>	Rinse thoroughly with plenty of water, also under the eyelids. Consult a physician.
<b>After ingestion:</b>	Clean mouth with water and drink afterwards plenty of water. Induce vomiting only under medical attention. Call a physician immediately.

##### 4.2 Most important symptoms and effects, both acute and delayed:

See Section 11 for more detailed information on health effects and symptoms.

##### 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:

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### Extinguishing media which must not be used for safety reasons:

High volume water jet.

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#### 5.2 **Special hazards arising from the substance or mixture:**

Vapours may form explosive mixtures with air. Heating or fire can release toxic gas.

#### 5.3 **Advice for firefighters:**

In the event of fire, wear self-contained breathing apparatus.

Wear appropriate body protection (full protective suit).

#### **Additional information:**

Cool closed containers exposed to fire with water spray.

### Section 6: Accidental release measures

#### 6.1 **Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep people away from and upwind of spill/leak.

Provide adequate ventilation. Keep away from heat and sources of ignition.

Avoid contact with skin and eyes. Do not breathe gas/fumes/vapour/spray.

#### 6.2 **Environmental precautions:**

Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.

If the product contaminates rivers and lakes or drains inform respective authorities.

#### 6.3 **Methods and material for containment and cleaning up:**

Ensure adequate ventilation. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Treat recovered material as described in the section "Disposal considerations". After cleaning, flush away traces with water.

#### 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:**

Keep container tightly closed. Provide sufficient air exchange and/or exhaust in work rooms.

Avoid formation of aerosol. Avoid contact with skin and eyes. Take off all contaminated clothing immediately. Do not breathe gas/fumes/vapour/spray. Avoid contact with the skin and the eyes.

Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

##### **Precautions 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.

#### 7.2 **Conditions for safe storage, including any incompatibilities:**

##### **Requirements to be met by storerooms and receptacles:**

Keep in an area equipped with solvent resistant flooring. Keep in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

##### **Advice on storage compatibility:**

Combustible liquid. Vapours may form explosive mixtures with air. Vapours are heavier than air and may spread along floors. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Use only explosion-proof equipment.

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#### 7.3. **Specific end use(s):**

Dental prothesis.

### Section 8: Exposure controls/personal protection

#### 8.1 **Control parameters:**

##### **Exposure limits (EH40):**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
64-17-5	ethanol	500	960	(2)	TRGS 900	

#### 8.2 **Exposure controls:**

##### **Appropriate engineering controls:**

Refer to protective measures listed in sections 7 and 8.

##### **Protective and hygiene measures:**

In case of insufficient ventilation, wear suitable respiratory equipment. Breathing apparatus with filter. Recommended Filter type A. When using do not eat or drink.

##### **Eye/face protection:**

Safety glasses.

##### **Hand protection:**

Solvent-resistant gloves As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use. Protective gloves should be replaced at first signs of wear. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. To achieve a sufficient splashguard (min. break through time 10 min - 60 min) the following combination of gloves is recommended: combination of HPPE laminated film (glove thickness: 0.062 mm) and a two-layer glove consisting of nitrile rubber as coating material (glove thickness: 0.4 mm) and nylon as support material.

##### **Skin protection:**

Impervious clothing.

##### **Respiratory protection:**

In case of inadequate ventilation wear respiratory protection.

##### **General advice:**

Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

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#### Section 9: Physical and chemical properties

##### 9.1 Information on basic physical and chemical properties:

###### General information:

Physical state: liquid  
Colour: dark yellow  
Odour: alcohol-like

###### Important information about the protection of health, safety and the environment:

###### Property:

###### Value:

Boiling point/boiling range:	78 °C
Flash point:	17 °C
Flammability solid:	not applicable
Flammability gas:	not applicable
Auto-ignition temperature solid:	not applicable
Auto-ignition temperature gas:	not applicable
Decomposition temperature:	not determined
Danger of explosion:	Product is not explosive. Formation of explosive air/vapour mixtures is possible.
Density:	0,842 g/cm <sup>3</sup>
Water solubility/miscibility:	miscible
pH-Value:	not determined

##### 9.2 Other information:

No further relevant information available.

#### Section 10: Stability and reactivity

##### 10.1: Reactivity: Chemical stability; Possibility of hazardous reactions:

No decomposition if stored and applied as directed.

##### 10.2: Chemical stability:

Stable under recommended storage conditions.

##### 10.3: Possibility of hazardous reactions:

Formation of explosive air/vapour mixtures is possible.

##### 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:

Incompatible with oxidizing agents.

##### 10.6: Hazardous decomposition products:

Heating or fire can release toxic gas.

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## Section 11: Toxicological information

### 11.1 Information on toxicological effects:

#### Acute toxicity:

For this mixture is no data available. Please find this information in the listing of the component/components below in the MSDS.

#### ATE tested:

CAS No                      Chemical name

**64-17-5**                      **ethanol**

<u>Exposure routes</u>	<u>Method</u>	<u>Dose</u>	<u>Species</u>	<u>Source</u>
oral	LD50	10.470 mg/kg	Rat	OECD 401
dermal	LD50	> 2000 mg/kg	Rabbit	OECD 402
inhalative (vapour)	LC50	(51mg/lh)	Rat, 4 h	OECD 403

NOAEL: 1730 mg/kg bw/day (Rat, female) (Oral; 90-day) (OECD Test Guideline 408)

Target Organs: Liver

NOAEL: > 20 mg/l (Rat, male) (Inhalation; 21 days) (OECD Test Guideline 403)

CAS No                      Chemical name

**8050-09-7**                      **colophony**

<u>Exposure routes</u>	<u>Method</u>	<u>Dose</u>	<u>Species</u>	<u>Source</u>
oral	LD50	7.500-10.000 mg/kg	Rat male	
oral	LD50	5.000-10.000 mg/kg	Rat female	

#### Irritation and corrosivity:

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

#### Sensitising effects:

May cause an allergic skin reaction.

#### STOT-single exposure:

May cause respiratory irritation

#### Severe effects after repeated or prolonged exposure:

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

#### Carcinogenic /mutagenic/toxic effects for reproduction:

Contains no ingredient listed as a carcinogen.

It is not considered carcinogenic mutagenic and toxic.

#### Aspiration hazard:

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

#### Additional information on tests:

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

## Section 12: Ecological information

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#### 12.1. Toxicity:

CAS No      Chemical name

**64-17-5      ethanol**

<u>Aquatic toxicity</u>	<u>Method</u>	<u>Dose</u>	<u>(h)-(d)/Species</u>	<u>Source</u>
<b>Acute fish toxicity</b>	LC50	15300 mg/l	96 h/Pimephales promelas; fathead minnow (flow-through test)	US-EPA
	LC50	11200 mg/l	24 h/Salmon gairdneri (flow-through test)	US-EPA
	LC50	13000 mg/l	96 h/Oncorhynchus mykiss	OECD 203
<b>Toxicity to daphnia and other aquatic invertebrates</b>	EC50	858 mg/l	24 h/Artemia salina (Marin water)	OECD 202
	EC50	12340 mg/l	48 h/Daphnia magna; water flea (fresh Water)	ASTM E 729-80
	LC50	5012 mg/l	48 h/Ceriodaphnia dubia; water flea (static test, fresh water)	ASTM E 729-80
<b>algae</b>	EC50	275 mg/l	72 h/Chlorella vulgaris; Fresh water algae; (static test; fresh water)	OECD 201
	EC10	11,5 mg/l	72 h/Chlorella vulgaris; Fresh water algae; (static test)	OECD 201
<b>Bacteria</b>	EC50	5800 mg/l	4 h(Paramecium caudatum)	
<b>Chronic toxicity</b>				
<b>Fish</b>	NOEC	245 mg/l	30 d/QSAR	
<b>Aquatic</b>	NOEC	9,6 mg/l	10 d/Ceriodaphnia dubia; water flea	
<b>Invertebrates</b>	NOEC	79 mg/l	12 d/Palaemonetes pugio (static test)	

CAS No      Chemical name

**8050-09-7 colophony**

<u>Aquatic toxicity</u>	<u>Method</u>	<u>Dose</u>	<u>(h)-(d)/Species</u>	<u>Source</u>
<b>Acute fish toxicity</b>	NOELR	1000 mg/l		
	LL50	>1000 mg/l	96 h/Danio rerio; zebra fish	
<b>Toxicity to daphnia and other aquatic invertebrates</b>	EL50	911 mg/l	48 h/Daphnia magna; Water flea	
<b>algae</b>	EL50	>1000 mg/l	72 h algae	
	NOELR	>1000 mg/l	algae	

#### 12.2. Persistence and degradability:

**CAS-No. 64-17-5 ethanol**

**Persistence:**

**Biodegradability:**

Related to: Water non-significant hydrolysis  
97 % (Exposure Time: 28 d)(OECD Test Guideline 301B)  
Reilly biodegradable

**CAS-No. 8050-09-7 colophony**

**Persistence**

**and degradability:**

64 % (Exposure Time: 28 d) Not readily biodegradable.  
The 10 day time window criterion is not fulfilled.

#### 12.3. Bioaccumulative potential:

**CAS-No. 64-17-5 ethanol:**

log Kow -0,3 BCF: 0,66 Does not bio accumulate.

**CAS-No. 8050-09-7 colophony:**

BCF: 56,3 Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible. log Pow > 3

#### 12.4. Mobility in soil:

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**CAS-No. 64-17-5 ethanol:** The product is mobile in water environment.

**CAS-No. 8050-09-7 colophony:** Practically insoluble in water.

#### 12.5. Results of PBT and vPvB assessment:

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects:

Do not flush into surface water or sanitary sewer system.

### Section 13: Disposal considerations

#### 13.1 Waste treatment methods:

##### **Advice on disposal:**

Disposal together with normal waste is not allowed. Can be incinerated, when in compliance with local regulations. Do not empty into drains.

##### **Waste disposal number of waste from residues/unused products:**

No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

##### **Uncleaned packaging:**

Empty remaining contents. Risk of explosion. Do not burn, or use a cutting torch on, the empty drum. Offer rinsed packaging material to local recycling facilities. Packaging's that cannot be cleaned are to be disposed of in the same manner as the product.

### Section 14: Transport information

#### 14.1. – 14.4. UN number; UN proper shipping name; Transport hazard class(es);

##### Packing group:

##### **Road ADR/Railway RID:**

14.1 UN no.:	1170
14.2 Proper Shipping Name:	ETHANOL SOLUTION
14.3 Transport hazard class(es):	3
14.4 Packaging Group:	II
Hazard label:	3
Classification code:	F1
Limited quantities (LQ):	1L
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

##### **Inland waterways transport (ADN):**

14.1 UN no.:	1170
14.2 Proper Shipping Name:	ETHANOL SOLUTION
14.3 Transport hazard class(es):	3
14.4 Packaging Group:	II
Hazard label:	3
Classification code:	F1
Limited quantities (LQ):	1L

##### **Transport by sea IMDG-Code:**

14.1 UN no.:	1170
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14.2 Proper Shipping Name: ETHANOL SOLUTION  
14.3 Transport hazard class(es): 3  
14.4 Packaging Group: II  
Hazard label: 3  
Classification code: F1  
Limited quantities (LQ): 1L

#### **Air transport ICAO-TI/IATA-DGR:**

14.1 UN no.: 1170  
14.2 Proper Shipping Name: ETHANOL SOLUTION  
14.4 Packaging Group: II  
Hazard label: 3  
Classification code: F1  
Limited quantity-Passenger: 1L

#### **14.5. Environmental hazards:**

ENVIRONMENTALLY HAZARDOUS: no

#### **14.6. Special precautions for user:** not applicable

#### **14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code:**

Not applicable.

### Section 15: Regulatory information

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

##### **National regulatory information:**

WGK (DE): slightly water endangering;  
Self-classification according VwVwS of 17 May 1999, Annex 4  
Störfallverordnung(DE): Falls under the German StörfallV. 7b.  
Directive 1999/13/EC: 78 %

#### **15.2 Chemical safety assessment:**

Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

EU. REACH, Annex XVII, Point Nos.: 40; Listed  
Marketing and Use Restrictions (Regulation 1907/2006/EC)

EU. Regulation No EC Number: 200-578-6; Listed  
1451/2007 [Biocides], Annex I, OJ (L 325)

### Section 16: Other information

The details in this document are based on the state of our knowledge at the time of revision.

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They do not constitute an assurance of the described product properties in terms of statutory warranty requirements. The providing of this document to a recipient does not relieve the recipient of his or her responsibility toward compliance with all laws and stipulations applicable to the product. This applies in particular to the further sale or distribution of the product or substances or items containing the product, in other jurisdictions and with regard to the protection of third-party intellectual property rights. If the described product is processed or mixed with other substances or materials, the details stated in this document cannot be conferred to the resultant new product unless this has been expressly mentioned. If the product is repackaged, the recipient is obligated to additionally provide the required safety-related information.

#### Relevant P-phrases (Number and full text):

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P280 Wear protective gloves/ eye protection/ face protection.
- P303 + P361 + P353
- IF ON SKIN (or hair): Take off immediately all contaminated clothing.  
Rinse skin with water/shower.
- P370 + P378
- In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. ^

#### Relevant H- and EUH-phrases (Number and full text):

- H225 Highly flammable liquid and vapour.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.

#### Abbreviations and acronyms:

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- 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)
- 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 (division of the American Chemical Society)
- LC<sub>50</sub>: Lethal concentration, 50 percent
- LD<sub>50</sub>: Lethal dose, 50 percent