

## SAFETY DATA SHEET

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# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : **Heat-Seal Adhesive 375 (4020)**  
**40% dissolved in toluene and boiling point spirit 100/140**

Revision date : 28.02.2017      Version (Revision) : 4.0.0 (3.0.0)  
Print date : 16.05.2017

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

### 1.1 Product identifier

Heat-Seal Adhesive 375 (4020)  
40% dissolved in toluene and boiling point spirit 100/140

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

#### Relevant identified uses

Adhesives for the preservation and restoration of art and cultural assets

### 1.3 Details of the supplier of the safety data sheet

**Manufacturer / Supplier :** Lascaux Colours & Restauro, Barbara Diethelm AG  
**Street :** Zürichstrasse 42  
**Postal code/city :** CH-8306 Brüttisellen  
**Telephone :** +41 44 807 41 41  
**Telefax :** +41 44 807 41 40  
**Information contact :** info@lascaux.ch  
**European address :** Lascaux Colours & Restauro Europe GmbH  
**Street :** Turmstrasse 11  
**Postal code/city :** D-78467 Konstanz  
**Telephone :** +49 7531 911 3996  
**Telefax :** +49 7531 911 3997  
**Information contact :** info@lascaux.de

### 1.4 Emergency telephone number

Tox Info Suisse, 24-h-emergency number 145, Tel. +41 44 251 51 51

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 [CLP]

Asp. Tox. 1 ; H304 - Aspiration hazard : Category 1 ; May be fatal if swallowed and enters airways.  
STOT SE 3 ; H336 - STOT-single exposure : Category 3 ; May cause drowsiness or dizziness.  
STOT RE 2 ; H373 - STOT-repeated exposure : Category 2 ; May cause damage to organs through prolonged or repeated exposure.  
Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.  
Flam. Liq. 2 ; H225 - Flammable liquids : Category 2 ; Highly flammable liquid and vapour.  
Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Chronic 3 ; Harmful to aquatic life with long lasting effects.  
Repr. 2 ; H361d - Reproductive toxicity : Category 2 ; Suspected of damaging the unborn child.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

##### Hazard pictograms



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Flame (GHS02) · Health hazard (GHS08) · Exclamation mark (GHS07)

## Signal word

Danger

## Hazard components for labelling

TOLUENE ; CAS No. : 108-88-3

NAPHTA (PETROLEUM), HYDROTREATED LIGHT ; CAS No. : 64742-49-0

## Hazard statements

H225 Highly flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H361d Suspected of damaging the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H412 Harmful to aquatic life with long lasting effects.

## Precautionary statements

P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260 Do not breathe mist and spray mist.  
P273 Avoid release to the environment.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P331 Do NOT induce vomiting.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

## 2.3 Other hazards

None

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

TOLUENE ; EC No. : 203-625-9; CAS No. : 108-88-3

Weight fraction : ≥ 35 - < 40 %

Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Asp. Tox. 1 ; H304 Repr. 2 ; H361d STOT RE 2 ; H373 Skin Irrit. 2 ; H315 STOT SE 3 ; H336

NAPHTA (PETROLEUM), HYDROTREATED LIGHT ; CAS No. : 64742-49-0

Weight fraction : ≥ 20 - < 25 %

Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Asp. Tox. 1 ; H304 STOT SE 3 ; H336 Aquatic Chronic 2 ; H411

#### Additional information

Full text of H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

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**Following inhalation**

Take the casualty into the fresh air and keep warm. Keep at rest. Irregular breathing/no breathing: artificial respiration. Unconsciousness: lateral position - call a physician.

**In case of skin contact**

Immediately remove all contaminated clothing. Wash away with soap and water and rinse. Do NOT use solvents or thinners.

**After eye contact**

Remove contact lenses, keep eyelids open. Flush with plenty of water (10 - 15 min.). Call a physician.

**After ingestion**

Contact a doctor immediately. Keep at rest. Do not induce vomiting.

**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**

None

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

Alcohol resistant foam, CO<sub>2</sub>, powders, water spray.

**Unsuitable extinguishing media**

Waterjet.

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

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

**5.3 Advice for firefighters**

**Special protective equipment for firefighters**

Appropriate breathing apparatus may be required.

**5.4 Additional information**

Cool endangered containers with water in case of fire. Do not allow the quenching water into the sewage system.

**SECTION 6: Accidental release measures**

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

Remove ignition sources. Provide for sufficient ventilation. Do not inhale the vapour. Refer to protective measures listed in sections 7 and 8.

**6.2 Environmental precautions**

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

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

**For cleaning up**

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent; avoid use of solvents.

**6.4 Reference to other sections**

None

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Prevent the creation of inflammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the OEL (=Occupational Exposure Limit). Additionally, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid contact with skin and eyes. Do not inhale the vapour. Do not eat or drink during work - no smoking. Comply with the health and safety at work laws. For personal protection see Section 8. Gas mask in case of spray processing.

#### Protective measures

##### Measures to prevent fire

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical equipment should be protected to the appropriate standard. Floors should be of the conducting type.

#### Hints on joint storage

Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.

Storage class ( D ) : 3

Storage class (TRGS 510) ( D ) : 3

#### Further information on storage conditions

Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep away from ignition sources - No smoking. Keep containers dry and cool. Keep containers in a well-ventilated place. Comply with the health and safety at work laws.

### 7.3 Specific end use(s)

None

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

TOLUENE ; CAS No. : 108-88-3

Limit value type (country of origin) : MAK ( CH )

Limit value : 50 ppm / 190 mg/m<sup>3</sup>

Remark : H OL B RF3 RE3

Version : 01.01.2013

Limit value type (country of origin) : STEL ( CH )

Limit value : 200 ppm / 760 mg/m<sup>3</sup>

Remark : H OL B RF3 RE3

Version : 01.01.2013

Limit value type (country of origin) : TRGS 900 ( D )

Limit value : 50 ppm / 190 mg/m<sup>3</sup>

Peak limitation : 4(II)

Remark : H, Y

Version : 04.11.2017

Limit value type (country of origin) : TRGS 903 ( D )

Parameter : Toluene / Whole blood (B) / End of exposure or end of shift

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Limit value : 1 mg/l  
Version : 31.03.2004  
Limit value type (country of origin) : TRGS 903 ( D )  
Parameter : o-Cresol / Urine (U) / End of exposure or end of shift ; At long term exposure: after several previous shifts  
Limit value : 3 mg/l  
Version : 31.03.2004  
Limit value type (country of origin) : STEL ( EC )  
Limit value : 100 ppm / 384 mg/m<sup>3</sup>  
Remark : H  
Version : 07.02.2006  
Limit value type (country of origin) : TWA ( EC )  
Limit value : 50 ppm / 192 mg/m<sup>3</sup>  
Remark : H  
Version : 07.02.2006

## 8.2 Exposure controls

### Personal protection equipment

#### Eye/face protection

Use safety glasses.

#### Skin protection

##### Hand protection

Solvent-resistant protective gloves must be worn. For prolonged or repeated handling, use barrier creams to protect the exposed areas of the skin.

##### Body protection

Personal should wear antistatic clothings made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact. After skin contact wash thoroughly with soap and water or use recognised skin cleanser. Do Not use solvents or thinners.

#### Respiratory protection

If workplace limits are exceeded, a gas mask approved for this purpose must be worn.

### Occupational exposure controls

#### Technical measures to prevent exposure

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit) , suitable respiratory protection must be worn.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state** : Pasty.

**Colour** : Whitish transpar.

#### Odour

Poor, characteristic.

#### Safety relevant basis data

**Initial boiling point and boiling range** : ( 1013 hPa ) 107 - 137 °C  
**Flash point** : > 6 °C  
**Vapour pressure** : ( 50 °C ) approx. 35 hPa

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Density : ( 20 °C ) approx. 0,84 g/cm<sup>3</sup>  
pH : not applicable  
Viscosity : ( 20 °C ) approx. 20000 mPa.s

**9.2 Other information**  
None

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

No information available.

**10.2 Chemical stability**

No information available.

**10.3 Possibility of hazardous reactions**

No information available.

**10.4 Conditions to avoid**

Stable under recommended storage and handling conditions(See section 7).

**10.5 Incompatible materials**

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

**10.6 Hazardous decomposition products**

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

No information available.

**11.4 Other adverse effects**

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

**SECTION 12: Ecological information**

**12.1 Toxicity**

No information available.

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Other adverse effects**

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No information available.

## 12.7 Additional ecotoxicological information

There are no data available on the product itself. Do not empty into waters or drains.

## SECTION 13: Disposal considerations

Contaminated packaging must be emptied of all residues and, following appropriate cleaning, may be sent to a recycling plant. Uncleaned packaging must be disposed of in the same manner as the medium.

### 13.1 Waste treatment methods

#### Product/Packaging disposal

##### Waste codes/waste designations according to EWC/AVV

08 01 11: waste paint and varnish containing organic solvents or other dangerous substances.

## SECTION 14: Transport information

### 14.1 UN number

UN 1133

### 14.2 UN proper shipping name

#### Land transport (ADR/RID)

ADHESIVES

#### Sea transport (IMDG)

ADHESIVES

#### Air transport (ICAO-TI / IATA-DGR)

ADHESIVES

### 14.3 Transport hazard class(es)

#### Land transport (ADR/RID)

Class(es) : 3  
Classification code : F1  
Hazard identification number (Kemler No.) : 33  
Tunnel restriction code : D/E  
Special provisions : 640D · LQ 5 I · E 2 · ADR : III (<= 450 l)  
Hazard label(s) : 3

#### Sea transport (IMDG)

Class(es) : 3  
EmS-No. : F-E / S-D  
Special provisions : LQ 5 I · E 2 · IMDG 2.3.2.3 (Packing group III <= 30 l)  
Hazard label(s) : 3

#### Air transport (ICAO-TI / IATA-DGR)

Class(es) : 3  
Special provisions : E 2 · IATA 3.3.3.1 (Packing group III <= 30 l)  
Hazard label(s) : 3

### 14.4 Packing group

II

### 14.5 Environmental hazards

Land transport (ADR/RID) : No  
Sea transport (IMDG) : No  
Air transport (ICAO-TI / IATA-DGR) : No



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**14.6 Special precautions for user**

None

**SECTION 15: Regulatory information**

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

**National regulations**

**Technische Anleitung Luft (TA-Luft) ( D ) :**

Weight fraction (Number 5.2.5. I) : 35 - 40 %

**Water hazard class (WGK)**

Class ( D ) : 2 (Hazardous to water) Classification according to VwVwS

**15.2 Chemical safety assessment**

No information available.

**SECTION 16: Other information**

**16.1 Indication of changes**

None

**16.2 Abbreviations and acronyms**

None

**16.3 Key literature references and sources for data**

None

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

No information available.

**16.5 Relevant H- and EUH-phrases (Number and full text)**

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

**16.6 Training advice**

None

**16.7 Additional information**

The details in this material safety data sheet satisfy national and EC legislation. We have no knowledge or control over the user's working conditions however. The product may not be used for any purpose other than that specified in chapter 1 unless written consent has been obtained. The user is responsible for the observance of all required statutory provisions.

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.

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