

## Safety data sheet

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

#### 1.1. Product identifier

Code: **C700025**  
 Product name: **UNIVERSAL TRAY ADHESIVE 10 ml**

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

Identified Uses	Industrial	Professional	Consumer
For professional use only. Adhesive for impression silicones.	-	✓	-
AVOID USE: adhesives or spray paints for general public (restriction n. 48, Annex XVII to Reg. 1907/2006/CE).	-	-	✓

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

Name: **Zhermack S.p.a**  
 Full address: **Via Bovazecchino 100**  
 District and Country: **45021 Badia Polesine (RO) Italy**

Tel. **+39 0425-597611**

Fax **+39 0425-597689**

e-mail address of the competent person responsible for the Safety Data Sheet

**msds@zhermack.com**

#### 1.4. Emergency telephone number.

For urgent inquiries refer to. **0039 0425597611**

### SECTION 2. Hazards identification.

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

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Reproductive toxicity, category 2	H361d	Suspected of damaging the unborn child.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.

#### 2.2. Label elements.

**C700025**  
**UNIVERSAL TRAY ADHESIVE 10 ml**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.



Signal words:                      Danger

Hazard statements:

<b>H226</b>	Flammable liquid and vapour.
<b>H361d</b>	Suspected of damaging the unborn child.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.

Precautionary statements:

<b>P201</b>	Obtain special instructions before use.
<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P233</b>	Keep container tightly closed.
<b>P280</b>	Wear protective gloves / clothing and eye / face protection.
<b>P301+P310</b>	IF SWALLOWED: immediately call a POISON CENTER / doctor.
<b>P304+P340</b>	IF INHALED: remove person to fresh air and keep comfortable for breathing.

**Contains:**                      ETHYLBENZENE  
    TOLUENE  
  
    XYLENE (MIXTURE OF ISOMERS)

**2.3. Other hazards.**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**SECTION 3. Composition/information on ingredients.**

**3.1. Substances.**

Information not relevant.

**3.2. Mixtures.**

Contains:

Identification.	Conc. %.	Classification 1272/2008 (CLP).
<b>XYLENE (MIXTURE OF ISOMERS)</b>		
CAS. 1330-20-7	20 - 30	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Note C
EC. 215-535-7		
INDEX. 601-022-00-9		
Reg. no. 01-2119488216-32-XXXX		

**C700025**  
**UNIVERSAL TRAY ADHESIVE 10 ml****TOLUENE**

CAS. 108-88-3

10 - 20

Flam. Liq. 2 H225, Repr. 2 H361d, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336

EC. 203-625-9

INDEX. 601-021-00-3

Reg. no. 01-2119471310-51-XXXX

**ETHYLBENZENE**

CAS. 100-41-4

9 - 19

Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Aquatic Chronic 3 H412

EC. 202-849-4

INDEX. 601-023-00-4

**DIPROPYLENE GLYCOL MONOMETHYL ETHER**

CAS. 34590-94-8

1 - 3

Substance with a community workplace exposure limit.

EC. 252-104-2

INDEX. -

Reg. no. 01-2119450011-60-XXXX

Note: Upper limit is not included into the range.

The full wording of hazard (H) phrases is given in section 16 of the sheet.

**SECTION 4. First aid measures.****4.1. Description of first aid measures.**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

**SECTION 5. Firefighting measures.****5.1. Extinguishing media.****SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

**C700025  
UNIVERSAL TRAY ADHESIVE 10 ml****UNSUITABLE EXTINGUISHING EQUIPMENT**

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

**5.2. Special hazards arising from the substance or mixture.****HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

**5.3. Advice for firefighters.****GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures.****6.1. Personal precautions, protective equipment and emergency procedures.**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

**6.2. Environmental precautions.**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections.**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7. Handling and storage.****7.1. Precautions for safe handling.**

**C700025**  
**UNIVERSAL TRAY ADHESIVE 10 ml**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

**7.2. Conditions for safe storage, including any incompatibilities.**

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

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

See section 1.2.

**SECTION 8. Exposure controls/personal protection.**

**8.1. Control parameters.**

Regulatory References:

AUS	Österreich	Grenzwerteverordnung 2011 - GKV 2011
BEL	Belgique	AR du 11/3/2002. La liste est mise à jour pour 2010
CZE	Česká Republika	Nářízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FIN	Suomi	HTP-arvot 2012. Haitallisiksi tunnetut pitoisuudet - Sosiaali- ja terveystieteiden tutkimuskeskus julkaisuja 2012:5
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GRB	United Kingdom	EH40/2005 Workplace exposure limits
IRL	Éire	Code of Practice Chemical Agent Regulations 2011
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Databank of the social and Economic Council of Netherlands (SER) Values, AF 2011:18
NOR	Norge	Veiledning om Administrative normer for forurensning i arbeidsatmosfære
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

**XYLENE (MIXTURE OF ISOMERS)**

Threshold Limit Value.

Type	Country	TWA/8h	STEL/15min
		mg/m <sup>3</sup>	ppm
		mg/m <sup>3</sup>	ppm

**C700025**  
**UNIVERSAL TRAY ADHESIVE 10 ml**

MAK	AUS	221	50	442	100	SKIN.
VLEP	BEL	221	50	442	100	SKIN.
TLV	CZE	200		400		SKIN.
AGW	DEU	440	100	880	200	SKIN.
MAK	DEU	440	100	880	200	SKIN.
VLA	ESP	221	50	442	100	SKIN.
HTP	FIN	220	50	440	100	SKIN.
VLEP	FRA	221	50	442	100	SKIN.
WEL	GRB	220	50	441	100	
OEL	IRL	221	50	442	100	SKIN.
TLV	ITA	221	50	442	100	SKIN.
OEL	NLD	210		442		SKIN.
TLV	NOR	108	25			SKIN.
NDS	POL	100				
MAK	SWE	221	50	442	100	SKIN.
OEL	EU	221	50	442	100	SKIN.
TLV-ACGIH		434	100	651	150	

## Predicted no-effect concentration - PNEC.

Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value for water, intermittent release	0,327	mg/l
Normal value of STP microorganisms	6,58	mg/l

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers. Acute local	Effects on consumers			Effects on workers			
		Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	Chronic systemic 1,6 mg/kg				
Inhalation.	VND	174 mg/m3	174 mg/m3	14,8 mg/m3	VND	289 mg/m3	VND	77 mg/m3
Skin.			VND	108 mg/kg			VND	180 mg/kg

**TOLUENE**

## Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	190	50	380	100	SKIN.
VLEP	BEL	77	20	384	100	SKIN.
TLV	CZE	200		500		SKIN.
AGW	DEU	190	50	760	200	SKIN.
MAK	DEU	190	50	760	200	
TLV	DNK	94	25			SKIN.
VLA	ESP	192	50	384	100	SKIN.
HTP	FIN	81	25	380	100	SKIN.
VLEP	FRA	76,8	20	384	100	SKIN.
WEL	GRB	191	50	384	100	SKIN.
OEL	IRL	192	50	384	100	SKIN.
TLV	ITA	192	50			SKIN.
OEL	NLD	150		384		

**C700025**  
**UNIVERSAL TRAY ADHESIVE 10 ml**

TLV	NOR	94	25			SKIN.
NDS	POL	100		350		
MAK	SWE	192	50	384	100	SKIN.
OEL	EU	192	50	384	100	SKIN.
TLV-ACGIH		75,4	20			

**ETHYLBENZENE**

## Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	440	100	880	200	SKIN.
VLEP	BEL	442	100	551	125	SKIN.
TLV	CZE	200		500		SKIN.
AGW	DEU	440	100	880	200	SKIN.
MAK	DEU	88	20	176	40	SKIN.
TLV	DNK	217	50			
VLA	ESP	441	100	884	200	SKIN.
HTP	FIN	220	50	880	200	SKIN.
VLEP	FRA	88,4	20	442	100	SKIN.
WEL	GRB	441	100	552	125	SKIN.
OEL	IRL	442	100	884	200	SKIN.
TLV	ITA	442	100	884	200	SKIN.
OEL	NLD	215		430		SKIN.
TLV	NOR	20	5			SKIN.
NDS	POL	200		400		
MAK	SWE	200	50	450	100	
OEL	EU	442	100	884	200	SKIN.
TLV-ACGIH		87	20			

**DIPROPYLENE GLYCOL MONOMETHYL ETHER**

## Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	270		550		SKIN.
AGW	DEU	310	50	310	50	
MAK	DEU	310	50	310	50	
TLV	DNK	300	50			
VLA	ESP	308	50			SKIN.
HTP	FIN	310	50			
VLEP	FRA	308	50			SKIN.
WEL	GBR	308	50			SKIN.
TLV	ITA	308	50			SKIN.
TLV	NOR	300	50			SKIN.
NDS	POL	240		480		
MAK	SWE	300	50	450	75	SKIN.
OEL	EU	308	50			SKIN.

**C700025  
UNIVERSAL TRAY ADHESIVE 10 ml**

TLV-ACGIH 606 100 909 150 SKIN.

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

**8.2. Exposure controls.**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

**HAND PROTECTION**

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

**SKIN PROTECTION**

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS.**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

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

Appearance	fluid
Colour	light blue
Odour	characteristic of solvent
Odour threshold.	Not available.
pH.	Not available.



**C700025  
UNIVERSAL TRAY ADHESIVE 10 ml**

Melting point / freezing point.	Not available.
Initial boiling point.	113 °C.
Boiling range.	Not available.
Flash point.	27 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1,011 Kg/l
Solubility	partially miscible
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	Not available.
Decomposition temperature.	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

**9.2. Other information.**

Information not available.

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

There are no particular risks of reaction with other substances in normal conditions of use.

TOLUENE: breaks down in sunlight.

**10.2. Chemical stability.**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions.**

The vapours may also form explosive mixtures with the air.

TOLUENE: risk of explosion on contact with fuming sulphuric acid, nitric acid, silver perchlorates, nitrogen dioxide, non-metal halogenides, acetic acid, organic nitrocompounds. Can form explosive mixtures with the air. May react dangerously with: strong oxidising agents, strong acids, sulphur (in the presence of heat).

**10.4. Conditions to avoid.**

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

**10.5. Incompatible materials.**

Information not available.

**C700025  
UNIVERSAL TRAY ADHESIVE 10 ml****10.6. Hazardous decomposition products.**

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

**SECTION 11. Toxicological information.****11.1. Information on toxicological effects.**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

This product must be handled carefully because of its possible teratogenic effects, which may be toxic and damage the foetus development.

The introduction of even small quantities of this liquid into the respiratory system in case of ingestion or vomit may cause bronchopneumonia and pulmonary edema.

This product may cause functional disorders or morphological mutations after repeated or prolonged exposure and/or may accumulate inside the human body and is thus graded as dangerous.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

Acute effects: inhalation of this product may irritate the lower and upper respiratory tract and cause cough and respiratory disorders; at higher concentrations it can also cause pulmonary edema. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

**ETHYLBENZENE**

LD50 (Oral).3500 mg/kg Rat

LD50 (Dermal).15354 mg/kg Rabbit

LC50 (Inhalation).17,2 mg/l/4h Rat

**Irritation/Corrosion**

Skin irritation: Slightly irritating (publication, rabbit, in vivo, ECHA dossier).

Eye irritation: Slightly irritating (publication, rabbit, in vivo, ECHA dossier).

Skin Sensitization: No data available.

Genotoxicity: Negative (OECD 473, in vitro mammalian chromosome aberration test and OECD 486, in vivo, ECHA dossier).

Carcinogenicity: Insufficient data. According to NTP there was some evidence of carcinogenicity in a test conducted on mice (lung tumors and hepatocellular neoplasms) (NTP study, GLP, ECHA dossier).

Toxicity to reproduction: Negative (OECD 415, rat, ECHA dossier).

STOT Repeated exposure: Insufficient data. Liver, lung, thyroid and pituitary pathology was observed in mice that inhaled  $\geq$  250 ppm ethylbenzene for 2 years. (ECHA dossier).

ETHYLBENZENE: like the benzene homologues, may exert an effect on the CNS with depression, narcosis, often preceded by dizziness and accompanied by headache. It is irritating to the skin, conjunctivae and respiratory apparatus.

**XYLENE (MIXTURE OF ISOMERS)**

LD50 (Oral).3523 mg/kg (EU Method B.1, GLP, rat, ECHA dossier).

LD50 (Dermal).> 4200 mg/kg (rabbit, ECHA dossier).

LC50 (Inhalation).6350 ppm (EU Method B.2, rat, ECHA dossier).

**Acute toxicity:**

Dermal: No data available.

**Irritation/Corrosion**

Skin irritation: Slightly irritating (weight of evidence approach, in vivo, rabbit, ECHA dossier).

Eye irritation: Slightly irritating (weight of evidence approach, in vivo, rabbit, ECHA dossier).

Skin Sensitization: Insufficient data (ECHA dossier).

STOT – Repeated exposure: There was no evidence of treatment-related systemic toxicity or carcinogenicity following gavage administration of mixed xylenes (oral and inhalation exposure, ECHA dossier).

Genotoxicity in vitro: Negative (in vitro mammalian chromosome aberration test, ECHA dossier).

Genotoxicity in vivo: Negative (similar to OECD 478, mixed xylenes, chromosome aberration, ECHA dossier).

Carcinogenicity: Negative (EU Method B.32, rat, ECHA dossier).

Toxicity to reproduction: Negative (EPA OPPTS 870.3800, rat, ECHA dossier).

## TOLUENE

LD50 (Oral).5580 mg/kg (rat, ECHA dossier).

LD50 (Dermal).12124 mg/kg (rabbit, ECHA dossier).

LC50 (Inhalation).28,1 mg/l/4h (rat, ECHA dossier).

## Irritation/Corrosion

Skin irritation: Irritating (OECD 404, in vivo, rabbit, ECHA dossier).

Eye irritation: Not irritating (OECD 405, in vivo, rabbit, ECHA dossier).

Skin Sensitization: Not sensitising (OECD 406, Magnusson-Kligman, ECHA dossier).

STOT – Repeated/single exposure: Target organ: central nervous system (inhalation exposure, tests on animals, ECHA dossier).

Genotoxicity in vitro: Negative (OECD 471, OECD 476, mutation assay, ECHA dossier).

Genotoxicity in vivo: Negative (Chromosome aberration assay, rat, ECHA dossier).

Carcinogenicity: No data available.

Toxicity to reproduction: Possible adverse effects on fetal development (OECD 416 and EPA OTS 798.4350, rat, ECHA dossier).

Aspiration toxicity: Possible chemical pneumonitis (ECHA dossier).

TOLUENE: it has a toxic effect on the central and peripheral nervous system (with encephalopathies and polyneuritis). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

**SECTION 12. Ecological information.****12.1. Toxicity.**

## TOLUENE

LC50 - for Fish.

5,5 mg/l/96h (Oncorhynchus kisutch, dynamic, freshwater, ECHA dossier).

EC50 - for Crustacea.

3,78 mg/l/48h (Daphnia magna, semi-static, freshwater, ECHA dossier).

EC50 - for Algae / Aquatic  
Plants.

134 mg/l/72h (ECHA dossier).

XYLENE (MIXTURE OF  
ISOMERS)

LC50 - for Fish.

7,6 mg/l/96h (OECD 203, Oncorhynchus mykiss, ECHA dossier)

EC50 - for Crustacea.

3,82 mg/l/48h (Daphnia magna, ECHA dossier).

EC50 - for Algae / Aquatic  
Plants.

4,36 mg/l/72h (OECD 201, Pseudokirchneriella subcapitata, ECHA dossier).

**12.2. Persistence and degradability.**

## ETHYLBENZENE

Solubility in water.

mg/l 1000 - 10000

Rapidly biodegradable.

XYLENE (MIXTURE OF  
ISOMERS)

Rapidly biodegradable.

## TOLUENE

Solubility in water.

mg/l 100 - 1000

Rapidly biodegradable.

**12.3. Bioaccumulative potential.**

**C700025  
UNIVERSAL TRAY ADHESIVE 10 ml**

## ETHYLBENZENE

Partition coefficient: n-  
octanol/water. 3,6

## TOLUENE

Partition coefficient: n-  
octanol/water. 2,73  
BCF. 90

**12.4. Mobility in soil.**

Information not available.

**12.5. Results of PBT and vPvB assessment.**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Other adverse effects.**

Information not available.

**SECTION 13. Disposal considerations.****13.1. Waste treatment methods.**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

**CONTAMINATED PACKAGING**

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information.****14.1. UN number.**

ADR / RID, IMDG, 1133  
IATA:

**14.2. UN proper shipping name.**

ADR / RID: ADHESIVES

IMDG: ADHESIVES

IATA: ADHESIVES

**14.3. Transport hazard class(es).**

**C700025**  
**UNIVERSAL TRAY ADHESIVE 10 ml**

ADR / RID: Class: 3 Label: 3



IMDG: Class: 3 Label: 3



IATA: Class: 3 Label: 3

**14.4. Packing group.**

ADR / RID, IMDG, IATA: III

**14.5. Environmental hazards.**

ADR / RID: NO

**14.6. Special precautions for user.**

ADR / RID:	HIN - Kemler: 30	Limited Quantities 5 L	Tunnel restriction code (D/E)
	Special Provision: 640E		
IMDG:	EMS: F-E, S-D	Limited Quantities 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special Instructions:	A3	

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.**

Information not relevant.

## SECTION 15. Regulatory information.

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.**Seveso category. 6Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.Product Point. 3 - 40Contained substance.

Point. 48 TOLUENE

Substances in Candidate List (Art. 59 REACH).

None.

**C700025  
UNIVERSAL TRAY ADHESIVE 10 ml**Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

**15.2. Chemical safety assessment.**

No chemical safety assessment has been processed for the mixture and the substances it contains.

**SECTION 16. Other information.**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Repr. 2</b>	Reproductive toxicity, category 2
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H361d</b>	Suspected of damaging the unborn child.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H319</b>	Causes serious eye irritation.

**C700025**  
**UNIVERSAL TRAY ADHESIVE 10 ml**

<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - ECHA website

**Note for users:**

A safety data sheet is not required for this product under article 31 of Regulation 1907/2006/EC.  
This safety data sheet has been created on a voluntary basis.

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety

**Zhermack S.p.a**

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**C700025**  
**UNIVERSAL TRAY ADHESIVE 10 ml**

Page n. 16/16

laws and regulations. The producer is relieved from any liability arising from improper uses.  
Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:  
The following sections were modified:  
01 / 03 / 08.