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Version: 1.0

0823 - 0827

# **TENAX**

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

### **Product identifier**

Product form : Mixtures Trade name : TENAX : 0823 - 0827 Product code Vaporizer : Aerosol Product group : Trade product

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

### 1.2.1. Relevant identified uses

Intended for general public

Main use category : Consumer use

Use of the substance/mixture : Dye for smooth leather.

### 1.2.2. Uses advised against

No additional information available

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

### Manufacturer

**AVEL** Lombre

16320 MAGNAC LAVALETTE - FRANCE T +33 5 45 64 74 74 - F +33 5 45 64 77 36

avel@avel.com - www.avel.com

### **Emergency telephone number**

: +33 5 45 64 74 74 **Emergency number** 

### SECTION 2: Hazards identification

### Classification of the substance or mixture

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

Aerosol, Category 1 H222;H229 Serious eye damage/eye irritation, H319 Category 2 Specific target organ toxicity — Single H336

exposure, Category 3, Narcosis

Full text of hazard classes and H-statements : see section 16

### Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. May cause drowsiness or dizziness. Causes serious eye irritation.

### Label elements

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

Hazard pictograms (CLP)





GHS02

Signal word (CLP) : Danger

Hazardous ingredients : Acetone (Propan-2-one); Ethyl acetate Hazard statements (CLP) : H222 - Extremely flammable aerosol.

H229 - Pressurised container: May burst if heated.

H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.



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Precautionary statements (CLP)

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P211 - Do not spray on an open flame or other ignition source.

P251 - Do not pierce or burn, even after use.

P261 - Avoid breathing spray.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves, eye protection.

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. P312 - Call a doctor, a POISON CENTER if you feel unwell. P337+P313 - If eye irritation persists: Get medical advice/attention.

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

**EUH-statements** : EUH066 - Repeated exposure may cause skin dryness or cracking.

### Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

### **Substances**

Not applicable

### **Mixtures**

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Acetone (Propan-2-one)	(CAS-No.) 67-64-1 (EC-No.) 200-662-2 (EC Index-No.) 606-001-00-8 (REACH-no) 01-2119471330-49	25 - 50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Ethyl acetate	(CAS-No.) 141-78-6 (EC-No.) 205-500-4 (EC Index-No.) 607-022-00-5 (REACH-no) 01-2119475103-46	10 - 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Xylene	(CAS-No.) 1330-20-7 (EC-No.) 215-535-7 (EC Index-No.) 601-022-00-9 (REACH-no) 01-2119488216-32	1 - 5	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304
4-hydroxy-4-methylpentan-2-one	(CAS-No.) 123-42-2 (EC-No.) 204-626-7 (EC Index-No.) 603-016-00-1 (REACH-no) 01-2119473975-21	1 - 5	Eye Irrit. 2, H319 STOT SE 3, H335

### Specific concentration limits:

Name	Product identifier	Specific concentration limits
4-hydroxy-4-methylpentan-2-one	(CAS-No.) 123-42-2 (EC-No.) 204-626-7 (EC Index-No.) 603-016-00-1 (REACH-no) 01-2119473975-21	(C >= 10) Eye Irrit. 2, H319

Full text of H-statements: see section 16

### SECTION 4: First aid measures

### **Description of first aid measures**

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.



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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU)

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: Wash skin with plenty of water. First-aid measures after skin contact

First-aid measures after eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Eye irritation.

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

### **Extinguishing media**

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### Special hazards arising from the substance or mixture 5.2.

Fire hazard : Extremely flammable aerosol.

Explosion hazard : Pressurised container: May burst if heated.

Hazardous decomposition products in case of

: Toxic fumes may be released.

### Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

### For non-emergency personnel 6.1.1.

Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing Emergency procedures

dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

### 6.1.2. For emergency responders

: Do not attempt to take action without suitable protective equipment. For further information Protective equipment

refer to section 8: "Exposure controls/personal protection".

### **Environmental precautions**

Avoid release to the environment.

### Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

### Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

### Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective

equipment.

Do not eat, drink or smoke when using this product. Always wash hands after handling the Hygiene measures

product.

### Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked

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



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### Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### Control parameters

Xylene (1330-20-7)				
EU	IOELV TWA (mg/m³)	221 mg/m³		
EU	IOELV TWA (ppm)	50 ppm		
EU	IOELV STEL (mg/m³)	442 mg/m³		
EU	IOELV STEL (ppm)	100 ppm		
United Kingdom	Local name	Xylene		
United Kingdom	WEL TWA (mg/m³)	220 mg/m³ o-,m-,p- or mixed isomers		
United Kingdom	WEL TWA (ppm)	50 ppm o-,m-,p- or mixed isomers		
United Kingdom	WEL STEL (mg/m³)	441 mg/m³ o-,m-,p- or mixed isomers		
United Kingdom	WEL STEL (ppm)	100 ppm o-,m-,p- or mixed isomers		
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity), BMGV (Biological monitoring guidance values are listed in Table 2)		
4-hydroxy-4-methylper	ntan-2-one (123-42-2)			
United Kingdom	Local name	4-Hydroxy-4-methylpentan-2-one		
United Kingdom	WEL TWA (mg/m³)	241 mg/m³		
United Kingdom	WEL TWA (ppm)	50 ppm		
United Kingdom	WEL STEL (mg/m³)	362 mg/m³		
United Kingdom	WEL STEL (ppm)	75 ppm		
Acetone (Propan-2-one	e) (67-64-1)			
United Kingdom	Local name	Acetone		
United Kingdom	WEL TWA (mg/m³)	1210 mg/m³		
United Kingdom	WEL TWA (ppm)	500 ppm		
United Kingdom	WEL STEL (mg/m³)	3620 mg/m³		
United Kingdom	WEL STEL (ppm)	1500 ppm		
Ethyl acetate (141-78-6	3)			
EU	IOELV TWA (mg/m³)	734 mg/m³		
EU	IOELV STEL (mg/m³)	1486 mg/m³		
United Kingdom	Local name	Ethyl acetate		
United Kingdom	WEL TWA (ppm)	200 ppm		
United Kingdom	WEL STEL (ppm)	400 ppm		

### **Exposure controls**

### Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

## Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment



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### **Environmental exposure controls:**

Avoid release to the environment.

### SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Liquid under pressure. Aerosol.

Colour : Various. Odour : characteristic. Odour threshold : No data available No data available pН Relative evaporation rate (butylacetate=1) : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available Flash point : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available

Flammability (solid, gas) : Extremely flammable aerosol.

Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density No data available Solubility : No data available Log Pow : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available

Explosive properties : Pressurised container: May burst if heated.

Oxidising properties : No data available **Explosive limits** : No data available

### Other information

No additional information available

### SECTION 10: Stability and reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

### **Chemical stability**

Contains gas under pressure; may explode if heated.

### Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### Information on toxicological effects

: Not classified Acute toxicity



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Xylene (1330-20-7)		
LD50 oral	4300 mg/kg bodyweight	
LD50 dermal rabbit	3200 mg/kg	
LD50 dermal	> 5000 mg/kg bodyweight	
LC50 inhalation rat (mg/l)	21.7 mg/l/4h	
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 10000 mg/l	
4-hydroxy-4-methylpentan-2-one (123-42-2)		
LD50 oral	3002 mg/kg bodyweight	
LD50 dermal rabbit	13750 mg/kg	
LD50 dermal	> 1875 mg/kg bodyweight	
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 7600 mg/l	
Acetone (Propan-2-one) (67-64-1)		
LD50 oral rat	> 2000 mg/kg	
LD50 oral	5800 mg/kg bodyweight	
LD50 dermal rabbit	> 2000 mg/kg	
LD50 dermal	> 15688 mg/kg bodyweight	
LC50 inhalation rat (mg/l)	> 20 mg/l/4h	
LC50 inhalation rat (Dust/Mist - mg/l/4h)	50100 mg/l	
Ethyl acetate (141-78-6)		
LD50 oral rat	> 5000 mg/kg	
LD50 oral	5620 mg/kg bodyweight	
LD50 dermal rabbit	> 2000 mg/kg	
LD50 dermal	> 18000 mg/kg bodyweight	
LC50 inhalation rat (Dust/Mist - mg/l/4h)	57700 mg/l	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: May cause drowsiness or dizziness.	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
TENAX		
Vaporizer	Aerosol	

## SECTION 12: Ecological information

### 12.1. Toxicity

: The product is not considered harmful to aquatic organisms nor to cause long-term adverse Ecology - general effects in the environment.

Xylene (1330-20-7)	
LC50 fish 1	> 86 mg/l
LC50 fish 2	2.6 mg/l
EC50 Daphnia 1	3.82 mg/l (Cladocère (Daphnia magna))
EC50 other aquatic organisms 1	350 mg/l waterflea
EC50 72h algae (1)	2.2 mg/l
NOEC chronic fish	> 1.3 mg/l (Oncorhynchus mykiss)
NOEC chronic crustacea	1.57 mg/l (Cladocère (Daphnia magna))

4-hydroxy-4-methylpentan-2-one (123-42-2)	
LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 1000 mg/l (Daphnia magna)



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4-hydroxy-4-methylpentan-2-one (123-42-2)		
EC50 other aquatic organisms 1	> 1000 mg/l waterflea	
EC50 other aquatic organisms 2	> 1000 mg/l	
EC50 72h algae (1)	> 1000 mg/l (Algae)	
Acetone (Propan-2-one) (67-64-1)		
LC50 fish 1	5540 mg/l (Onchorhynchus mykiss (truite arc-en-ciel))	
LC50 fish 2	> 100 mg/l	
EC50 Daphnia 1	> 100 mg/l (Daphnia magna)	
EC50 other aquatic organisms 1	12600 mg/l waterflea	
EC50 other aquatic organisms 2	3400 mg/l	
Ethyl acetate (141-78-6)		
LC50 fish 1	230 mg/l	
EC50 Daphnia 1	717 mg/l (Daphnia magna)	
EC50 other aquatic organisms 1	717 mg/l waterflea	
EC50 other aquatic organisms 2	3300 mg/l	

### 12.2. Persistence and degradability

Xylene (1330-20-7)		
Persistence and degradability	Readily biodegradable.	
Biodegradation	87.8 % (28 days)	
4-hydroxy-4-methylpentan-2-one (123-42-2)		
BOD (% of ThOD)	≈ % ThOD	
Biodegradation	≈ 98 %	
Acetone (Propan-2-one) (67-64-1)		
Chemical oxygen demand (COD)	2.21 g O <sub>2</sub> /g substance	
Ethyl acetate (141-78-6)		
Persistence and degradability	Readily biodegradable.	
Chemical oxygen demand (COD)	1.82 g O₂/g substance	
Biodegradation	70 % (28 days - OCDE 301 D)	
12.3 Rioaccumulative notential		

Xylene (1330-20-7)	
Bioconcentration factor (BCF REACH)	< 25.9
Log Pow	3.1
Bioaccumulative potential	Low potential (1).
4-hvdroxy-4-methylpentan-2-one (123-42-2)	

# Log Pow 1.03

1.00		
Acetone (Propan-2-one) (67-64-1)		
Log Pow	-0.2 (20°C)	
Ethyl acetate (141-78-6)		
Log Pow 0.7		

## Mobility in soil

No additional information available

### Results of PBT and vPvB assessment

No additional information available

### Other adverse effects

No additional information available



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### **SECTION 13: Disposal considerations**

### Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1950	1950	1950	1950	1950
14.2. UN proper shippi	ng name			
AEROSOLS (AEROSOLS, flammable)	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
Transport document descr				
UN 1950 AEROSOLS (AEROSOLS, flammable), 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
14.3. Transport hazard	class(es)			
2.1	2.1	2.1	2.1	2.1
2	2	2)	2	2
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental ha	izards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

### 14.6. Special precautions for user

### - Overland transport

Classification code (ADR) : 5F

: 190, 327, 344, 625 Special provisions (ADR)

Limited quantities (ADR) : 11 Excepted quantities (ADR) : E0 Packing instructions (ADR) : P207

Special packing provisions (ADR) : PP87, RR6, L2

Mixed packing provisions (ADR) : MP9 Transport category (ADR) : 2 Special provisions for carriage - Packages : V14 (ADR)

Special provisions for carriage - Loading,

: CV9, CV12

unloading and handling (ADR)

Special provisions for carriage - Operation : S2

(ADR)

Tunnel restriction code (ADR) : D

- Transport by sea

Special provisions (IMDG) : 63, 190, 277, 327, 344, 959

Limited quantities (IMDG) : SP277 Excepted quantities (IMDG) : E0 Packing instructions (IMDG) : P207, LP02 Special packing provisions (IMDG) : PP87, L2



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 EmS-No. (Fire)
 : F-D

 EmS-No. (Spillage)
 : S-U

 Stowage category (IMDG)
 : None

 Stowage and handling (IMDG)
 : SW1, SW22

 Segregation (IMDG)
 : SG69

 MFAG-No
 : 126

- Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Y203
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 203
PCA max net quantity (IATA) : 75kg
CAO packing instructions (IATA) : 203
CAO max net quantity (IATA) : 150kg

Special provisions (IATA) : A145, A167, A802

ERG code (IATA) : 10L

- Inland waterway transport

Classification code (ADN) : 5F

Special provisions (ADN) : 190, 327, 344, 625

Limited quantities (ADN) : 1 L

Excepted quantities (ADN) : E0

Equipment required (ADN) : PP, EX, A

Ventilation (ADN) : VE01, VE04

Number of blue cones/lights (ADN) : 1

- Rail transport

Classification code (RID) : 5F

Special provisions (RID) : 190, 327, 344, 625

Limited quantities (RID) : 1L Excepted quantities (RID) : E0

Packing instructions (RID) : P207, LP02 Special packing provisions (RID) : PP87, RR6, L2

Mixed packing provisions (RID) : MP9
Transport category (RID) : 2
Special provisions for carriage – Packages : W14

(RID)

Special provisions for carriage - Loading,

unloading and handling (RID)

: CW9, CW12

Colis express (express parcels) (RID) : CE2
Hazard identification number (RID) : 23

### 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

### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances



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### **National regulations** 15.1.2.

No additional information available

### **Chemical safety assessment**

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Aerosol 1	Aerosol, Category 1	
Asp. Tox. 1	Aspiration hazard, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H222	Extremely flammable aerosol.	
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H229	Pressurised container: May burst if heated.	
H304	May be fatal if swallowed and enters airways.	
H312	Harmful in contact with skin.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H336	May cause drowsiness or dizziness.	
EUH066	Repeated exposure may cause skin dryness or cracking.	

### SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.