

**Safety Data Sheet**

According to U.S.A. Federal Hazcom 2012

**1. Identification**

**1.1. Product identifier**

Code: **SHINEX**  
Product name: **SHINEX**

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

Intended use: **SILICON WAX**

Identified Uses	Industrial	Professional	Consumer
<b>ADHESIVE SYSTEM/TREATMENT FOR STONE SECTOR</b>	✓	✓	-

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

Name: **TENAX SPA**  
Full address: **Via I Maggio, 226**  
District and Country: **37020 Volargne (VR) Italy**  
Tel: **+39 045 6887593**  
Fax: **+39 045 6862456**

e-mail address of the competent person responsible for the Safety Data Sheet: **msds@tenax.it**

Supplier: **Tenax Usa**  
**7606 Whitehall Executive Center Drive Suite 400, 28273 Charlotte NC, US**  
Tel. 001 7045831173 - Fax 001 7045833166  
**info@tenaxusa.com**

**1.4. Emergency telephone number**

For urgent inquiries refer to: **Infotrac**  
**US and Canada: 1-800-535-5053**  
**Int'l: 1-352-323-3500**  
**info@infotrac.net**

**2. Hazards identification**

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

The product is classified as hazardous pursuant to the provisions set forth in OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200). The product thus requires a safety datasheet. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

**Classification and Hazard Statement**

Flammable liquid, category 2	Highly flammable liquid and vapour.
Carcinogenicity, category 1B	May cause cancer.
Eye irritation, category 2	Causes serious eye irritation.
Skin irritation, category 2	Causes skin irritation.
Skin sensitization, category 1	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	May cause drowsiness or dizziness.

**Hazard pictograms:**



Signal words:

**Danger**

## 2. Hazards identification ... / >>

### Hazard statements:

<b>H225</b>	Highly flammable liquid and vapour.
<b>H350</b>	May cause cancer.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.

### Precautionary statements:

#### Prevention:

<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P261</b>	Avoid breathing dust / fume / gas / mist / vapours / spray.
<b>P202</b>	Do not handle until all safety precautions have been read and understood.
<b>P242</b>	Use only non-sparking tools.
<b>P201</b>	Obtain special instructions before use.
<b>P280</b>	Wear protective gloves/ protective clothing / eye protection / face protection.
<b>P271</b>	Use only outdoors or in a well-ventilated area.
<b>P264</b>	Wash the hands thoroughly after handling.
<b>P240</b>	Ground / bond container and receiving equipment.
<b>P243</b>	Take precautionary measures against static discharge.
<b>P241</b>	Use explosion-proof electrical / ventilating / lighting / . . . / equipment.
<b>P272</b>	Contaminated work clothing should not be allowed out of the workplace.

#### Response:

<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P303+P361+P353</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
<b>P308+P313</b>	IF exposed or concerned: Get medical advice / attention.
<b>P312</b>	Call a POISON CENTER / doctor / . . . / if you feel unwell.
<b>P333+P313</b>	If skin irritation or rash occurs: Get medical advice / attention.
<b>P337+P313</b>	If eye irritation persists: Get medical advice / attention.
<b>P304+P340</b>	IF INHALED: remove person to fresh air and keep comfortable for breathing.
<b>P302+P352</b>	IF ON SKIN: wash with plenty of water / . . .
<b>P362+P364</b>	Take off contaminated clothing and wash it before reuse.
<b>P370+P378</b>	In case of fire: use CO <sub>2</sub> , sand, powder to extinguish.
<b>P363</b>	Wash contaminated clothing before reuse.

#### Storage:

<b>P403+P235</b>	Store in a well-ventilated place. Keep cool.
<b>P403+P233</b>	Store in a well-ventilated place. Keep container tightly closed.
<b>P405</b>	Store locked up.

#### Disposal:

<b>P501</b>	Dispose of contents / container according to applicable law.
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### 2.2. Other hazards

Environmental classification as for Reg. (EC) 1272/2008 (CLP):

The product is classified as hazardous for environment pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP).

#### Classification and Hazard Statement

Hazardous to the aquatic environment, chronic toxicity, category 2                      Toxic to aquatic life with long lasting effects.

#### Hazard pictograms:



### Hazard statements:

<b>H411</b>	Toxic to aquatic life with long lasting effects.
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### Precautionary statements:

#### Prevention:

<b>P273</b>	Avoid release to the environment.
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#### Response:

<b>P391</b>	Collect spillage.
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#### Storage:

## 2. Hazards identification ... / >>

Disposal:  
**P501**

Dispose of contents / container according to applicable law.

Additional hazards  
Information not available

## 3. Composition/information on ingredients

### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification:
<b>TETRACHLOROETHYLENE</b> INDEX 602-028-00-4	37 ≤ x < 39	<b>Carcinogenicity, category 1B H350, Skin irritation, category 2 H315, Skin sensitization, category 1 H317, Specific target organ toxicity - single exposure, category 3 H336, Hazardous to the aquatic environment, chronic toxicity, category 2 H411</b>
EC 204-825-9 CAS 127-18-4 REACH Reg. 01-2119475329-28		
<b>ETHYL ACETATE</b> INDEX 607-022-00-5	32 ≤ x < 34	<b>Flammable liquid, category 2 H225, Eye irritation, category 2 H319, Specific target organ toxicity - single exposure, category 3 H336</b>
EC 205-500-4 CAS 141-78-6 REACH Reg. 01-2119475103-46		
<b>METHYLETHYLKETONE</b> INDEX 606-002-00-3	16 ≤ x < 17	<b>Flammable liquid, category 2 H225, Eye irritation, category 2 H319, Specific target organ toxicity - single exposure, category 3 H336</b>
EC 201-159-0 CAS 78-93-3 REACH Reg. 01-2119457290-43-XXXX		

\* There is a batch to batch variation.

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

## 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. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.  
**INHALATION:** Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.  
**INGESTION:** Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

## 5. Fire-fighting 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.  
**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

### 5. Fire-fighting measures ... / >>

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.

Combustion products: mainly COx.

#### 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).

### 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. 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.

### 7. Handling and storage

#### 7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. 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 cool and 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)

Information not available

## 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

USA	NIOSH-REL	NIOSH publication No. 2005-149, 3th printing, 2007.
USA	OSHA-PEL	Occupational Exposure Limits - Limits for Air Contaminants TABLE Z-1-1910.1000.
USA	CAL/OSHA-PEL	California Division of Occupational Safety and Health (Cal-OSHA) Permissible Exposure Limits (PELs).
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2022

#### TETRACHLOROETHYLENE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	170	25	678	100	
OEL	EU	138	20	275	40	SKIN
OSHA	USA		100		200	
CAL/OSHA	USA	170	25	685	100	

#### METHYLETHYLKETONE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	590	200	885	300	
OEL	EU	600	200	900	300	
OSHA	USA	590	200			
CAL/OSHA	USA	590	200	885	300	
NIOSH	USA	590	200	885	300	

#### ETHYL ACETATE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH	-	1441	400			
OEL	EU	734	200	1468	400	
OSHA	USA	1400	400			
CAL/OSHA	USA	1400	400			
NIOSH	USA	1400	400			

Legend:

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

##### METHYLETHYLKETONE

Sampling methods: [https://amcaw.ifa.dguv.de/substance/methoden/105-Butan-2-one\\_2016.pdf](https://amcaw.ifa.dguv.de/substance/methoden/105-Butan-2-one_2016.pdf)

##### ETHYL ACETATE

Sampling Method: [https://amcaw.ifa.dguv.de/substance/methoden/050-ethyl\\_acetate\\_2016.pdf](https://amcaw.ifa.dguv.de/substance/methoden/050-ethyl_acetate_2016.pdf)

### 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 comply with current regulations.

#### HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (OSHA 29 CFR 1910.138): 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 I professional long-sleeved overalls and safety footwear. Wash body with soap and water after removing protective clothing.

## 8. Exposure controls/personal protection ... / >>

### EYE PROTECTION

Wear airtight protective goggles (OSHA 29 CFR 1910.133).

### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a NIOSH certified filter, whose limit of use will be defined by the manufacturer (NIOSH 42 CFR 84, OSHA 29 CFR 1910.134). 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 or external air-intake breathing apparatus. For a correct choice of respiratory protection device, see standard NIOSH 42 CFR 84, OSHA 29 CFR 1910.134.

### ENVIRONMENTAL EXPOSURE CONTROLS

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

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

**HAND PROTECTION:** Protect hands with work gloves for protection from chemical agents in nitrile or fluoroelastomer (EN 374-1: 2016) at least type B or higher based on the risk assessment carried out by the company. Breakthrough time > 480 minutes.

Material thickness:

#### NITRILE

short contact > 0.38 mm

prolonged contact > 0.55 mm

#### FLUOROELASTOMER

short contact > 0.50 mm

prolonged contact > 1.50 mm

## 9. Physical and chemical properties

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

Properties	Value	Information
Appearance	liquid	
Colour	transparent	
Odour	characteristic	
Odour threshold	not available	
pH	not available	Reason for missing data: substance/mixture is non-polar/aprotic (eg: an organic solvent mixture)
Melting point / freezing point	not available	
Initial boiling point	> 35 °C (95 °F)	
Boiling range	not available	
Flash point	5 °C (41 °F)	
Evaporation rate	not available	
Flammability	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	1.09 g/cm <sup>3</sup>	
Solubility	immiscible with water	
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

VOC : 85,00 % - 926,50 g/litre

## 10. Stability and reactivity

### 10.1. Reactivity

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

#### TETRACHLOROETHYLENE

Decomposes at temperatures above 150°C/302°F. Decomposes if exposed to: UV rays, moisture.

#### METHYLETHYLKETONE

Reacts with: light metals, strong oxidants. Attacks various types of plastic materials. Decomposes under the effect of heat.

#### ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

### 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.

#### TETRACHLOROETHYLENE

Risk of explosion on contact with: alkaline metals, aluminium, alkaline hydroxides, sodium amides. May react violently with: strong bases, strong oxidising agents, alkaline earth metals, light metals, metal powders, zinc oxide.

#### METHYLETHYLKETONE

May form peroxides with: air, light, strong oxidising agents. Risk of explosion on contact with: hydrogen peroxide, nitric acid, sulphuric acid. May react dangerously with: oxidising agents, trichloromethane, alkalis. Forms explosive mixtures with: air.

#### ETHYL ACETATE

Risk of explosion on contact with: alkaline metals, hydrides, oleum. May react violently with: fluorine, strong oxidising agents, chlorosulphuric acid, potassium tert-butoxide. Forms explosive mixtures with: air.

### 10.4. Conditions to avoid

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

#### METHYLETHYLKETONE

Avoid exposure to: sources of heat.

#### ETHYL ACETATE

Avoid exposure to: light, sources of heat, naked flames.

### 10.5. Incompatible materials

#### METHYLETHYLKETONE

Incompatible with: strong oxidants, inorganic acids, ammonia, copper, chloroform.

#### ETHYL ACETATE

Incompatible with: acids, bases, strong oxidants, chlorosulphuric acid.

### 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.

#### TETRACHLOROETHYLENE

May develop: hydrogen chloride, phosgenes, chlorine, ethane tetrachloride, chlorine compounds.

## 11. Toxicological information

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.

### 11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

#### TETRACHLOROETHYLENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

**11. Toxicological information ... / >>**

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**TETRACHLOROETHYLENE**

Has a toxic effect on the central and peripheral nervous system, liver, kidneys and heart; the mucous membranes and the skin are irritated.

Interactive effects

Information not available

ACUTE TOXICITY

**TETRACHLOROETHYLENE**

LD50 (Oral):	3000 mg/kg
LD50 (Dermal):	10000 mg/kg
LC50 (Inhalation vapours):	4000 ppm/4h Rat

**METHYLETHYLKETONE**

LD50 (Oral):	2737 mg/kg Rat
LD50 (Dermal):	6480 mg/kg Rabbit
LC50 (Inhalation vapours):	23.5 mg/l/8h Rat

**ETHYL ACETATE**

LD50 (Oral):	5620 mg/kg ratto
LD50 (Dermal):	> 20000 mg/kg coniglio
LC50 (Inhalation vapours):	> 6000 ppm/4h ratto

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

May cause cancer

Carcinogenicity Assessment:

127-18-4	<b>TETRACHLOROETHYLENE</b>
	ACGIH:: A3
	IARC:2A
	NTP: Reasonably Anticipated

**TETRACHLOROETHYLENE**

Classified in Group 2A (probable human carcinogen) by the International Agency for Research on Cancer (IARC).  
Epidemiological studies show evidence of association between exposure to the substance and presence of various types of cancers: bladder cancer, non-Hodgkin's lymphomas and multiple myeloma (US EPA, 2014).  
Classified as a "probable carcinogen" by the US National Toxicology Program (NTP).

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE



## 11. Toxicological information ... / >>

Does not meet the classification criteria for this hazard class

### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

### 12.1. Toxicity

#### TETRACHLOROETHYLENE

LC50 - for Fish 5 mg/l/96h Limanda limanda

EC50 - for Crustacea 8.5 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants 3.62 mg/l/72h

#### METHYLETHYLKETONE

LC50 - for Fish 2993 mg/l/96h Pimephales Promelas

EC50 - for Crustacea 308 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants 2029 mg/l/96h Pseudokirchneriella subcapitata

#### ETHYL ACETATE

LC50 - for Fish 230 mg/l/96h pimephales promelas

EC50 - for Crustacea 165 mg/l/48h daphnia

### 12.2. Persistence and degradability

#### TETRACHLOROETHYLENE

Solubility in water 150 mg/l  
NOT rapidly degradable

#### METHYLETHYLKETONE

Solubility in water > 10000 mg/l  
Rapidly degradable

#### ETHYL ACETATE

Solubility in water > 10000 mg/l  
Rapidly degradable

### 12.3. Bioaccumulative potential

#### TETRACHLOROETHYLENE

Partition coefficient: n-octanol/water 2.53

BCF 49

#### METHYLETHYLKETONE

Partition coefficient: n-octanol/water 0.3

## 12. Ecological information ... / >>

### ETHYL ACETATE

Partition coefficient: n-octanol/water 0.68

BCF 30

### 12.4. Mobility in soil

### TETRACHLOROETHYLENE

Partition coefficient: soil/water 2.15

### 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  $\geq$  than 0,1%.

### 12.6. Other adverse effects

Information not available

## 13. Disposal considerations

### 13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

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

### CONTAMINATED PACKAGING

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

## 14. Transport information

### 14.1. UN number

ADR / RID, IMDG, IATA: 3295

### 14.2. UN proper shipping name

ADR / RID: HYDROCARBONS, LIQUID, N.O.S.

IMDG: HYDROCARBONS, LIQUID, N.O.S. (TETRACHLOROETHYLENE)

IATA: HYDROCARBONS, LIQUID, N.O.S.

### 14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



### 14.4. Packing group

ADR / RID, IMDG, IATA: II

## 14. Transport information ... / >>

### 14.5. Environmental hazards

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

### 14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33 Special provision: 640D	Limited Quantities: 1 L	Tunnel restriction code: (D/E)
IMDG:	EMS: F-E, S-D	Limited Quantities: 1 L	
IATA:	Cargo: Passengers: Special provision:	Maximum quantity: 60 L Maximum quantity: 5 L A3, A324	Packaging instructions: 364 Packaging instructions: 353

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

## 15. Regulatory information

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

#### U.S. Federal Regulations

#### TSCA:

All components of this product are listed on US Toxic Substances Control Act (TSCA) Inventory or are exempt from the listing / notification requirements.

#### Clean Air Act Section 112(b):

127-18-4	TETRACHLOROETHYLENE
78-93-3	METHYLETHYLKETONE

#### Clean Air Act Section 602 Class I Substances:

No component(s) listed.

#### Clean Air Act Section 602 Class II Substances:

No component(s) listed.

#### Clean Water Act – Priority Pollutants:

127-18-4	TETRACHLOROETHYLENE
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#### Clean Water Act – Toxic Pollutants:

127-18-4	TETRACHLOROETHYLENE
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#### DEA List I Chemicals (Precursor Chemicals):

No component(s) listed.

#### DEA List II Chemicals (Essential Chemicals):

78-93-3	METHYLETHYLKETONE
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#### EPA List of Lists:

#### 313 Category Code:

127-18-4	TETRACHLOROETHYLENE
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#### EPCRA 302 EHS TPQ:

No component(s) listed.

**15. Regulatory information ... / >>**

EPCRA 304 EHS RQ:  
No component(s) listed.

CERCLA RQ:  
127-18-4 TETRACHLOROETHYLENE  
78-93-3 METHYLETHYLKETONE  
141-78-6 ETHYL ACETATE

EPCRA 313 TRI:  
127-18-4 TETRACHLOROETHYLENE

RCRA Code:  
127-18-4 TETRACHLOROETHYLENE  
78-93-3 METHYLETHYLKETONE  
141-78-6 ETHYL ACETATE

CAA 112 (r) RMP TQ:  
No component(s) listed.

State Regulations

Massachusetts:  
127-18-4 TETRACHLOROETHYLENE  
78-93-3 METHYLETHYLKETONE  
141-78-6 ETHYL ACETATE

Minnesota:  
127-18-4 TETRACHLOROETHYLENE  
78-93-3 METHYLETHYLKETONE  
141-78-6 ETHYL ACETATE

New Jersey:  
127-18-4 TETRACHLOROETHYLENE  
78-93-3 METHYLETHYLKETONE  
141-78-6 ETHYL ACETATE

New York:  
127-18-4 TETRACHLOROETHYLENE  
78-93-3 METHYLETHYLKETONE  
141-78-6 ETHYL ACETATE

Pennsylvania:  
127-18-4 TETRACHLOROETHYLENE  
78-93-3 METHYLETHYLKETONE  
141-78-6 ETHYL ACETATE

California:  
127-18-4 TETRACHLOROETHYLENE  
78-93-3 METHYLETHYLKETONE  
141-78-6 ETHYL ACETATE

Proposition 65:  
WARNING! This product contains chemicals known to the State of California to cause cancer and birth defects or reproductive harm.

**127-18-4 TETRACHLOROETHYLENE**

Hazard type	NSRL / MADL (µg/day)				Intravenous	Note
	Oral	Dermal	Inhalation			
Carcinogenicity	14					-

International Regulations  
Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:  
None

Substances subject to the Rotterdam Convention:  
None

Substances subject to the Stockholm Convention:  
None

## 16. Other information

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

<b>H225</b>	Highly flammable liquid and vapour.
<b>H350</b>	May cause cancer.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H411</b>	Toxic to aquatic life with long lasting effects.

### LEGEND:

- 313 CATEGORY CODE: Emergency Planning and Community Right-to Know Act Section 313 Category Code
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAA 112 © RMP TQ: Risk Management Plan Threshold Quantity (Clean Air Act Section 112©)
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CERCLA RQ: Reportable Quantity (Comprehensive Environment Response, Compensation, and Liability Act)
- CLP: Regulation (EC) 1272/2008
- DEA: Drug Enforcement Administration
- EmS: Emergency Schedule
- EPA: US Environmental Protection Agency
- EPCRA: Emergency Planning and Community Right-to Know Act
- EPCRA 302 EHS TPQ: Extremely Hazardous Substance Threshold Planning Quantity (Section 302 Category Code)
- EPCRA 304 EHS RQ: Extremely Hazardous Substance Reportable Quantity (Section 304 Category Code)
- EPCRA 313 TRI: Toxics Release Inventory (Section 313 Category Code)
- 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
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PEL: Predicted exposure level
- RCRA Code: Resource Conservation and Recovery Act Code
- REACH: Regulation (EC) 1907/2006
- REL: Recommended exposure limit
- 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.
- TSCA: Toxic Substances Control Act
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- WHMIS: Workplace Hazardous Materials Information System.

### GENERAL BIBLIOGRAPHY:

- GHS rev. 3
- The Merck Index. 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy
  
- 6 NYCRR part 597
- Cal/OSHA website
- California Safe Drinking Water and Toxic Enforcement Act
- EPA website
- Hazard Communication Standard (HCS 2012)
- IARC website
- List Of Lists EPA: Consolidated List of Chemicals Subject to EPCRA, CERCLA and Section 112© of the Clean Air Act
- Massachussetts 105 CMR Department of public health 670.000: "Right to Know"

**16. Other information** ... / >>

- Minensota Chapter 5206 Departemnt Of Labor and Industry Hazardous Substances, Employee "Right to Know".
- New Jersey Worker and Community Right to know Act N.J.S.A.
- NTP. 2011. Report on Carcinogens, 12th Edition.
- OSHA website
- Pennsylvania, Hazardous Substance List, Chapter 323

**Note for users:**

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 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.

**CALCULATION METHODS FOR CLASSIFICATION**

Product classification derives from criteria established by the OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200), unless determined otherwise in Section 11 and 12. The data for evaluation of chemical-physical properties are reported in section 9.

**Changes to previous review:**

The following sections were modified:

02 / 03 / 05 / 08 / 09 / 10 / 11 / 16.