Material Safety Data Sheet (MSDS)

SOL 27 SOLVOLUX

Date: 25.03.19

SECTION 1. Identification of the substance or mixture and the company.

1.1 Product identifier:

Code: 0270030
Name: SOL 27 SOLVOLUX

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

Description / Use: degreasing safety solvent

1.3 Details of the supplier of the safety data sheet:

Company name: UNISON S.R.L.
Address: Via Vallone of Rovito, 10
Place and country: 36015 SCHIO VI
ITALY
tel. 0445/640988 Fax 0445/514275
E-mail of the competent person: info@unison.it

SECTION 2. Hazards identification.

2.1 Classification of the substance or mixture:

The product is classified as hazardous under the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments). Therefore the product requires a safety data sheet complies with the provisions of Regulation (EC) 1907/2006 and subsequent amendments. Further information on the risks to health and / or environmental hazards can be found in sections. 11 and 12 of this sheet.

2.1.1 Regulation 1272/2008 (CLP) and subsequent amendments:

Classification and hazard indications:

Flam. Liq. 2	H225
Asp. Tox. 1	H304
Eye Irr. 2	H319
Skin Irr. 2	H315
STOT SE 3	H336
Acquatic Chronic 2	H411

The full text of hazard (H) phrases is given in section 16.

2.2 Label elements:

Hazard pictograms:

Warning: Danger

Precautions:

Hazard:

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and penetrated in the respiratory tract.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness and dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautions:

P210	Keep away from sources of heat / sparks / flames / heated surfaces. Not smoking.
P233	Keep container tightly closed.
P264	Wash hands thoroughly after use.
P280	Wear protective gloves / protective clothing, protect eyes / face
P301 + P310	In case of ingestion seek immediately medical advice or a physician.
P304 + P340	In case of inhalation, remove to fresh air and keep at rest in a position comfortable for breathing.

Contains: Hydrocarbons, C7, n-alkanes, isoalcans, cyclic

2.3 Other hazards:
Information not available.

SECTION 3. Composition / information on ingredients.

Notes H and P (Directive 67/548 / EEC, Annex I) apply: The product is not to be considered carcinogenic.
Benzene <0.1%

3.1 Substances:
Non relevant information.

3.2 Mixtures:
It Contains:

Identification	**Conc.%**	**Classification 1272/2008 (CLP)**
Hydrocarbons, C7, n-alkanes, isoalcans, cyclic *CAS.-* *CE. 927-510-4* *INDEX. -* *Nr. Reg. 01-2119475515-33*	70-90	Flam. Liq. 2 H225 STOT SE 3 H336 Asp. Tox 1 H304 Skin Irr. 2 H315 Acquatic Chronic 2 H411
ETHYL ACETATE *CAS.141-78-6* *CE. 205-500-4* *INDEX. 607-022-00-5* *Nr. Reg. 01-2119475103-46*	15-20	Flam. Liq. 2 H225 Eye Irr. 2 H319 STOT SE 3 H336 EUH066

Note: Value of upper range excluded.
The full text of hazard (H) phrases is given in section 16.

SECTION 4. First aid measures.

4.1 Description of first aid measures:
EYES: Irrigate eyes immediately with plenty of water or boric solution for at least 15 minutes holding eyelids open. Seek medical advice in case of persistent pain and redness.
SKIN: Take off contaminated clothing. Take a shower immediately. Call a physician immediately. Wash contaminated clothing before reuse.
Ingestion: Do not induce vomiting. Do not give anything that is not authorized by a physician.
Inhalation: in case of exposure to high concentrations of vapors and mists remove the person from the contaminated area transporting it in a well ventilated place. Move the victim to fresh air.

4.2 Most important symptoms and effects, both acute and delayed:
no data available.

4.3 Indication of any need to seek medical attention and special treatment:
See section 4.1.

SECTION 5. Fire-fighting measures.

5.1 Extinguishing Media:
EXTINGUISHING MEDIA SUITABLE
Use extinguishing fires media of class B: carbon dioxide, dry chemical powder, foam, sand, earth. Carbon dioxide (CO_2). Water.

5.2 Special hazards arising from the substance or mixture:
The combustion can form toxic fumes.

5.3 Advice for Firefighters:
wear protective clothing and self - breathing masks.
Note: If possible in terms of safety, move undamaged containers from immediate hazard.

SECTION 6. Accidental leak measures.

6.1 Personal precautions, protective equipment and emergency procedures:
Block the leakage if there is no danger. Wear suitable protective equipment (including personal protective equipment referred in section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These guidelines apply to both clerks who work for the emergency interventions.

6.2 Environmental precautions:
Avoid the product to enter in sewers.

6.3 Methods and materials for containment and cleaning up:
Vacuum the spilled product into a suitable container. Absorb the substance with inert absorbent material. Ensure adequate ventilation of the area affected by the leak check the incompatibilities for the material of the containers in section 7. The disposal of contaminated material must be made in accordance with section 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:
Avoid direct contact with the product. Avoid breathing the fumes or vapors of the product. Ensure adequate ventilation. Avoid contact with skin and eyes. When using do not eat or drink. Do not smoke and keep away from heat, sparks and flame.

7.2 Conditions for safe storage, including any incompatibilities:
Store only in the original container. Keep the containers closed in a well ventilated place, away from direct sunlight. Store in a cool, well-ventilated area away from heat, flames, sparks and other sources of ignition. Store containers away from any incompatible materials, checking section 10.

7.3 Final specific use:
Solvent.

SECTION 8. Exposure controls / personal protection.

Exposure Limit Values: For oils, an OEL of 1440 mg / m3 is recommended (application of the CEFIC-HSPA guidelines using RCP: RECIPROCAL CALCULATION PROCEDURE).

8.1 Control parameters:

ETHYL ACETATE

Limit value.					
Type	State	TWA/8h		STEL/15min	
		mg/m^3	ppm	mg/m^3	ppm
TVL-ACGIH		1441	400	-	-
TVL	CH	1400	400	2800	800

Hydrocarbons, C7, n-alkanes, isoalcans, cyclic

Limit value..					
Type	State	TWA/8h		STEL/15min	
		mg/m^3	ppm	mg/m^3	ppm
OEL		1400	-	-	-

PNEC exposure limit value:

ETHYL ACETATE

Limit value				
Soft water	salt water	Sediment (soft water)	Sediment (salt water)	STP
mg/l	mg/l	mg/l	mg/l	mg/l
0.26	0.26	1.25	1.25	650

DNEL exposure limit value:

ETHYL ACETATE

Limit value					
exposure	*acute local*	*acute sistemics*	*acute chronics*	*sistemic chronics*	*CONSUMER*
Oral	VND	VND	VND	4.5 mg/kg	
Inhalation	734 mg/kg	734 mg/kg	367 mg/kg	367 mg/kg	
Dermic	VND	VND	VND	37 mg/kg	
exposure	*acute local*	*acute sistemics*	*acute chronics*	*sistemic chronics*	*WORKER*
Inhalation	1468 mg/kg	1468 mg/kg	734 mg/kg	734 mg/kg	
Dermic	VND	VND	VND	63 mg/kg	

8.2 Exposure controls:
As the use of adequate technical equipment must always take priority over personal protection equipment, ensure good ventilation in the workplace through effective local aspiration. For the selection of personal protective equipment if necessary, request advice from suppliers of chemicals. The personal protective equipment must bear the CE marking attesting their compliance with applicable regulations.
EYE PROTECTION:
Wear safety glasses. For further information, refer to the UNI-EN 166.
SKIN PROTECTION:
use coveralls and apron suitable material; immediately change contaminated clothing and wash before use. For further information, refer to the UNI-EN 465/466/467.
HAND PROTECTION:
wear gloves (eg. nitrile, PVC, neoprene ..) and work boots resistant. Replace if worn gloves. The choice of protective gloves depends also on the conditions of use and must take into account the manufacturer's instructions. For further information, refer to the UNI-EN 374. Anyway, operate according to good working practices.
RESPIRATORY PROTECTION:
Not needed for normal use.
ENVIRONMENTAL CONTROL OF THE ISSUE:
Emissions from production processes, including those from ventilation should be checked for the purposes of compliance with environmental protection.
Avoid any spillage in the environment, to prevent the product from entering the sewage system.

SECTION 9. Physical and chemical properties.

9.1 Information on basic physical and chemical:

Appearance:	colorless liquid
Odor:	characteristic
Distillation point:	92 ° C (ASTM D1078) *
Melting point:	n.d.
Explosive Properties:	Limits 1.0 - 7.0 / Vol
Auto-ignition temperature:	> 250 ° C
Viscosity (25 ° C):	not available
Steam Voltage:	48 mbar
Boiling range:	n.d.
Flash point:	<0 ° C
Water solubility:	not soluble
Benzene:	absent
density:	0.719 kg / l
Steam pressure:	n.d.
pH at 20 ° C:	not applicable

9.2 Other information:

Molecular Weight:	98.573
VOC (Directive 2004/42 / EEC):	100.00% - 719.18 g / l
VOC (Volatile Carbon):	94.54% - 679.89 g / l

SECTION 10. Stability and reactivity.

10.1 Reactivity:
In contact with strong oxidizing agents, reducing agents, acids or strong bases, exothermic reactions are possible.
ETHYL ACETATE: slowly decomposes to acetic acid and ethanol for the action of light, air and water.

10.2 Chemical stability:
Stable under normal conditions.

10.3 Possibility of hazardous reactions:
ETHYL ACETATE: Risk of explosion by contact with alkaline metals, hydrides, oleum. It can react violently with fluoride, strong oxidants, chlorine sulfuric acid, potassium tert-butoxide. Shapes explosive mixtures with the air.

10.4 Conditions to avoid:
Avoid overheating and light exposure, heat sources, free flames, etc.

10.5 Incompatible materials:
Oxidizing or reducing agents. Acids or bases.

10.6 Hazardous decomposition products:
In case of thermal decomposition, fumes can be released for health.

SECTION 11. Toxicological information.

11.1 Information on toxicological effects:

Inhalation: Prolonged inhalation of high concentrations of vapors may have a narcotic effect on the SCN, which may be weak (dizziness, headache, drowsiness) or acute (fainting), in which case immediate relief is required.
Skin contact: Direct and repeated contact may degrade and irritate the skin.
Ingestion: Ingestion may lead to the development of severe lung lesions. (consult a physician within 48h).

In the absence of experimental toxicological data on the product, any dangers of the health product have been evaluated on the basis of the properties of the substances contained, according to the criteria laid down by the classification standards for classification. Consider therefore the concentration of the individual hazardous substances mentioned in Sect. 3, to assess the toxicological effects of exposure to the product.

The introduction of small quantities of liquid in the respiratory system in the event of ingestion or vomiting can cause bronchopneumonia and pulmonary edema.
Acute effects: eye contact causes irritation; redness, edema, pain and tearing.
Inhalation of vapors may cause moderate upper respiratory tract irritation; skin contact may cause moderate irritation. Swallowing may cause health disorders, including abdominal pain with burns, nausea and vomiting.
Acute Effects: In contact with skin irritation with edema, erythema, dryness and cracking. Inhalation of vapors may cause moderate irritation of the upper respiratory tract. Swallowing may cause health disorders, including abdominal pain with burns, nausea and vomiting.
The product contains very volatile substances that can cause significant central nervous system depression (SNC) with effects such as drowsiness, dizziness, loss of reflection, narcosis.

ETHYL ACETATE
LD50 (Oral). 5600 mg / kg rat
LC50 (Inhalation). 56000 mg / l / 4h rat

Hydrocarbons, C7, n-alkanes, isoalcans, cyclic
LC50 (Inhalation)> 23.3 mg / l / 4h
LD50 (Oral). > 8 ml / kg Rat
LD50 (Cutaneo). > 4 ml / kg

SECTION 12. Ecological information.

The product is considered to be environmentally hazardous and presumed to be toxic to aquatic organisms with long-term adverse effects on the aquatic environment.

12.1 Toxicity:

ETHYL ACETATE:	LC50 Fish:> 200mg / l 96h Bluegill EC50 Crustaceans:> 700mg / l 48h Daphnia magna EC50 Algae:> 100mg / l 72h Algae
Hydrocarbons, C7, n-alkanes, isoalcans, cyclic:	LC50 Fish:> 134mg / l 96h Oncorhyncus mykiss EC50 Crustaceans: 12mg / l 48h Daphnia magna EC50 Algae:> 10mg / l 72h Pseudokirchneriella subcapitata

12.2 Persistence and degradability:
ETHYL ACETATE: rapidly biodegradable.

12.3 Bioaccumulative potential:
Bioaccumulable.

12.4 Mobility in ground:
little moving activity in the ground. Insoluble in water. The product evaporates in the atmosphere.

12.5 Results of PBT and vPvB
No substance

12.6 Other adverse effects:
None

SECTION 13. Disposal considerations.

13.1 Methods of waste treatment:
Reuse, when possible. The hazard level of waste containing this product should be evaluated according to applicable regulations. Disposal must be performed through an authorized waste management, in compliance with national and local regulations.
Avoid spillage of the product in soil, sewers or waterways.
Contaminated packaging must be recovered or disposed in compliance with national waste management regulations.

SECTION 14. Transport information.

Transport must be carried out by vehicles authorized to transport dangerous goods in accordance with the requirements of the current version of the A.D.R. and the applicable national provisions. Transport must be carried out in the original packaging, and in any case, in packaging that is made up of materials that are unreliable and can not generate this hazardous reaction. Dangerous goods loading and unloading staff must have received adequate training on the risks presented by the preparation and on any procedures to be taken in the event of emergency situations.

Road or rail transport:

ADR / RID class: 3 UN: 1206
Packing Group: II
Label: 3
No. Kemler: 33

Maritime transport:

Packing Group: II UN: 1206
Label: 3
Marine Pollutant: No

Airplane transport:

IATA: 3 UN: 1206
Packing Group: II
Label: 3

SECTION 15. Regulatory information.

15.1 Standards and legislation on health, safety and environment specific to the substance or mixture:

Seveso category. 7b, 9ii

Restrictions relating to the product or contained substances pursuant to Annex XVII to Regulation (EC) 1907/2006.
Point 3-40

Substances in Candidate List (Art. 59 REACH).
No.

Health checks.
Workers exposed to this hazardous chemical agent must be subjected to health surveillance carried out in accordance with the provisions of art. 41 of Legislative Decree no. 81 of 9 April 2008, except that the risk to the safety of the worker has been considered irrelevant, in accordance with Art. 224, paragraph 2.

VOC (Directive 2004/42 / EC)
Preparatory and cleaning products - preparatory products.
VOCs expressed in g / l of product ready to use:
Maximum limit: 850.00
VOC of the product: 719.18

Leg. 152/2006 and subsequent amendments.
emissions:
TAB. D Class 5 12.00%

15.2 Chemical Safety Assessment:

A chemical safety assessment has been carried out for the following substances:
ETHYL ACETATE
Hydrocarbons, C7, n-alkanes, isoalcans, cyclic

SECTION 16. Other information.

Text of risk phrases (H) mentioned in Section 2 and 3 of the sheet:

Flam. Liq. 2	Flammable Liquids Category 2
Asp. Tox. 1	Danger in the event of suction Category 1
Eye Irr. 2	Eye irritation Category 2
Skin Irr. 2	Skin irritation Category 2
STOT SE 3	Specific target organ toxicity (repeated exposure) Category 3
Aquatic cronic 2	Dangerous for the aquatic environment, chronic toxicity, Category 2
H225	Highly flammable liquid and vapor
H304	May be fatal if swallowed and penetrated in the respiratory tract.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness and dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking

GENERAL BIBLIOGRAPHY

1. Directive 1999/45 / EC as amended.
2. Directive 67/548 / EEC and following amendments and adjustments.
3. Regulation (EC) 1907/2006 of the European Parliament (REACH).
4. Regulation (EC) 1272/2008 of the European Parliament (CLP).
5. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP).
6. Regulation (EC) 453/2010 of the European Parliament.
7. The Merck index. Ed. 10
8. Handling Chemical Safety.
9. Niosh - Registry of Toxic Effects of Chemical Substances.
10. INRS - Fiche Toxicologique.
11. Patty - Industrial Hygiene and Toxicology.
12. N.I. Sax - Dangerous properties of industrial materials.
13. Web Site Agency ECHA.

Note for users:

the information contained herein is based on our state of knowledge at the above-specified date. They refer only to the product indicated and constitutes no guarantee of particular quality. The user must ensure the suitability and completeness of such information in relation to the specific use intended. This MSDS cancels and replaces any previous