SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name:	KIT VETRORESINA
Product code:	40.039
UFI code:	YHVR-D495-P10V-XHJT

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

Resin system used in the production of fiber-reinforced plastics or non-reinforced additive products. Resin system used in the production of reinforced plastic laminates.

1.3 Details of the supplier of the safety data sheet

Company name:	Silpar TK snc
Address:	Via Rosa Luxemburg 12/14 10093 - Collegno (TO)
Telephone:	+39 011 7791177
Fax:	+39 011 7791177
Email:	sicurezza@silpartkline.com

1.4 Emergency telephone number

CAVp "Osp. Pediatrico Bambino Gesù - Roma	Tel. +39 06 68593726
Az. Osp. Univ. Foggia	Tel. +39 0881 732326
Az. Osp. "A. Cardarelli" – Napoli	Tel. +39 081 7472870
CAV Policlinico "Umberto I" – Roma	Tel. +39 06 49978000
CAV Policlinico "A. Gemelli" – Roma	Tel. +39 06 3054343
Az. Osp. "Careggi" U.O. Tossicologia Medica – Firenze	Tel. +39 055 7947819
CAV Centro Nazionale di Informazione Tossicologica – Pavia	Tel. +39 0382 24444
Osp. Niguarda Ca' Granda – Milano	Tel. +39 02 66101029
Azienda Ospedaliera Papa Giovanni XXII – Bergamo	Tel. +39 800 883300
Azienda Ospedaliera Universitaria Integrata Verona	Tel. +39 800 011858

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Reg. EU n°1272/2008 [CLP]

Flam. Liq. 3 H226
Skin Irrit. 2 H315
Eye Irrit. 2 H319
STOT SE 3 H335
Repr. 2 H361d
STOT RE 1 H372
Aquatic Chronic 3 H412

2.2 Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements: H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic organisms with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand
P102 Keep out of reach of children
P103 ("Read label before use
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapour.
P264 Wash hands thoroughly after use.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse thoroughly for several minutes. Remove any contact lenses if it is easy to do so. Continue rinsing.
P403 + P235 Store in a well-ventilated place. Keep in a cool place.
P405 Keep locked up.
P501 Dispose of contents/container in accordance with local/regional/ national/international regulations

Contains:
Styrene

2.3 Other hazards

Substance vPvB: None - Substance PBT: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

N.A.

3.2 Mixtures

1.CAS 2.N° EC 3.N° Index 4.N° REACH	Name	Weight (%)	Classification 1272/2008 (CLP)
1.100-42-5 2.202-851-5 3.601-026-00-0 4.01-2119457861-32-XXXX	Styrene	25-50	Flam. Liq. 3 H226 Asp. Tox. 1 H304 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Acute Tox. 4 H332 STOT SE 3 H335 Repr. 2 H361d STOT RE 1 H372 Aquatic Chronic 3 H412
1.136-52-7 2.205-250-6 3.Not Available 4.01-2119524678-29-XXXX	Cobalt bis (2-ethylhexanoate).	0.5-1	Skin Sens. 1A H317 Eye Irrit. 2 H319 Repr. 1B H360 Aquatic Acute 1 H400 Aquatic Chronic 3 H412

The full text of the H phrases is given in section 16 of the safety data sheet

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	In case of contact with the eyes, rinse them with water for an adequate amount of time and keeping the eyelids open, then immediately consult an ophthalmologist. Protect the uninjured eye.
Skin contact	Take off contaminated clothing immediately. Wash the areas immediately with plenty of running water and possibly soap body who have come into contact with the product, even if only suspected. Wash your body completely (shower or bath). Immediately remove contaminated clothing and dispose of it safely. In case of contact with skin, wash immediately with plenty of water and soap.
Ingestion	Do not under any circumstances induce vomiting. SEEK MEDICAL EXAMINATION IMMEDIATELY
Inhalation	Remove to open air. If unwell, contact 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
In the event of an accident or discomfort, consult a doctor immediately (if possible show the instructions for use or the safety data sheet).

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media
SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water.

5.2 Special hazards arising from the substance or mixture
The fire will often produce thick, black smoke. Exposure to decomposition products can be dangerous to your health.
Do not breathe fumes.
In the event of a fire, the following may form:
- carbon monoxide (CO)
- carbon dioxide (CO2)
- sulfur dioxide (SO2)

5.3 Advice for firefighters
Cool the containers with jets of water to avoid decomposition of the product and the development of substances potentially dangerous to health. Always wear full fire protection equipment. Collect extinguishing water that must not be discharged into sewers. Dispose of the contaminated water used for extinguishing and the residue of the fire according to current regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Stop the leak if there is no danger.
Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These indications are valid both for workers and for emergency interventions.
Keep unequipped people away. Use explosion-proof equipment. Eliminate any sources of ignition (cigarettes, flames, sparks, etc.) or heat from the area where the leak occurred.

6.2 Environmental precautions
Prevent the product from spilling or entering drains or waterways. Spills or uncontrolled discharges into watercourses should be reported immediately to the Environment Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

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
Refer to sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Keep away from heat, sparks and open flames, do not smoke or use matches or lighters. Without adequate ventilation, vapors can accumulate on the ground and ignite even remotely, if triggered, with the risk of backfire. Avoid the accumulation of electrostatic charges. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas. Avoid dispersing the product into the environment.

7.2 Conditions for safe storage, including any incompatibilities
Store only in the original container. Store in a cool, well-ventilated place, away from heat sources, open flames, sparks and other sources of ignition. Store containers away from any incompatible materials, checking section 10.
Technical storage measures:
Minimum temperature: 5°C
Maximum temperature: 35°C
Maximum time: 4 months

7.3 Specific end use(s)
See section 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Styrene
TWA: 20 ppm/85 mg/m3 - TLV-ACGIH
STEL: 40 mg/m3/170 ppm - TLV-ACGIH

Derived No Effect Level (DNEL)
Styrene
Dermal 406 mg/kg bw/day (Systemic, chronic)
Inhalation 85 mg/m^3 (Systemic, chronic)
Inhalation 100 mg/m^3 (Local, chronic)
Inhalation 100 mg/m^3 (Systemic, acute)
Inhalation 100 mg/m^3 (Local, acute)
Dermal 343 mg/kg bw/day (Systemic, chronic)*
Inhalation 1 mg/m^3 (Systemic, chronic)*
Oral 2.1 mg/kg bw/day (Systemic, chronic)*
Inhalation 1 mg/m^3 (Local, chronic)*
Inhalation 10 mg/m^3 (Systemic, acute)*
Inhalation 10 mg/m^3 (Local, acute)*
Cobalt bis (2-ethylhexanoate).
Inhalation 235.1 µg/m^3 (Local, chronic)
Oral 175 µg/kg bw/day (Systemic, chronic)*
Inhalation 37 µg/m^3 (Local, chronic)*

* Values for the general population

PNEC exposure limit values
Styrene
0.028 mg/L (Fresh water)

0.014 mg/L (Water - intermittent release)
0.04 mg/L (Sea water)
0.418 mg/kg sediment dw (Sediment (Freshwater))
0.307 mg/kg sediment dw (Sediments (Marine))
0.146 mg/kg soil dw (Soil)
5 mg/L (STP)

STYRENE
IBE
Sample: urine
Sampling time: end of shift
Notation: Not specific
Presence of mandelic acid + phenylglyoxylic acid: 400 mg/g creatinine
Sample: urine
Sampling time: end of shift
Presence of styrene: 40 µg/L

Technical controls
Ensure adequate ventilation, especially in confined areas.
Make sure eye washers and showers are close to the workplace.
Use anti-exposure equipment
Provide an emergency exit.

8.2 Exposure controls

Hands protection	Protect hands with category work gloves (ref. Standard EN 374). For the final choice of the material of the work gloves it is necessary to consider: compatibility, degradation, breakage time and permeation. In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is not foreseeable. Gloves have a wear time that depends on the duration and method of use.
Respiratory protection	Air concentration levels should be kept below exposure limits. When the concentration in the air exceeds the TLV, respiratory protection is required: use approved EN149 FFP2 masks or half-face respirators Type EN140 with Filter Type EN143:A2 or full-face respirators EN136 (Filter Type EN143:A2).
Eye and face protection	Wear protective goggles (see standard EN 166).
Body and skin protection:	Wear professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Characteristic
Odour:	Characteristic
Odour threshold:	N.A.
pH:	N.A.
Melting point/freezing point:	N.A.
Initial boiling point and boiling range:	145°C
Flash point:	32°C
Evaporation rate:	N.A.
Flammability (solid, gas):	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour pressure 25°C:	844Pa
Vapour pressure 50°C:	3288.18 Pa (3.29 kPa)
Vapour density (Air=1):	N.A.
Relative density (Water=1):	N.A.
Solubility(ies):	N.A.

Partition coefficient: n-octanol/water:	N.A.
Auto-ignition temperature (°C):	490°C
Decomposition temperature:	N.A.
Kinematic viscosity:	>20,5 mm2/s
Explosive properties:	N.A.
Oxidising properties:	N.A.

9.2 Other information

VOC (Supply): 44.01% weight
VOC density at 25°C: 440.84 kg/m3
Average number of carbons: 8.02
Average molecular weight: 104.5g/mol

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions.
STYRENE
Polymerizes at temperatures above 65°C. Possibility of fire. Possibility of explosion.
It is added with inhibitor which requires a small amount of dissolved oxygen at a temperature < 25°C/77°F.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Exposed to high temperatures, the mixture can release dangerous decomposition products, such as carbon monoxide and dioxide, fumes, nitrogen oxide.
STYRENE
May react dangerously with: peroxides, strong acids. It can polymerize in contact with: aluminum trichloride, aziisobutyronitrile, dibenzoyl peroxide, sodium. Risk of explosion in contact with: butyllithium, chlorosulfuric acid, di-tertbutyl peroxide, oxidizing substances, oxygen.

10.4 Conditions to avoid

Avoid: the accumulation of electrostatic charges, heating, heat, flames and hot surfaces.
STYRENE
Avoid contact with: oxidizing substances, copper, strong acids.

10.5 Incompatible materials

Avoid contact with oxidizing materials. The product could catch fire. Avoid contact with strong reductants and oxidants, strong acids and bases, high temperature materials.
STYRENE
Incompatible materials: plastic materials.

10.6 Hazardous decomposition products

Hazardous combustion products may include, but are not limited to: Carbon monoxide. Carbon dioxide. Silica. Formaldehyde.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Unless otherwise specified, the data required by Regulation (EU) 878/2020 indicated below are to be understood N.A.:
a) acute toxicity

STYRENE
LD50 (Oral) 5000 mg/kg Rat
LC50 (Inhalation) 11.8 mg/l/4h Rat
STYRENE
Causes acute toxicity by inhalation (LC50 value in rats: 11.8 mg/l after 4 hours of vapor inhalation).
Isobutyl acetate
Dermal (rabbit) LD50: >5000 mg/kg
Inhalation (Rat) LC50; >23.4 mg/l4h
Oral (Rabbit) LD50; 4763 mg/kg
b) skin corrosion/irritation
The product is classified: Skin Irrit. 2 H315
c) serious eye damage/serious eye irritation
The product is classified: Eye Irrit. 2 H319
d) respiratory or skin sensitization
Based on available data, the classification criteria are not met.
e) mutagenicity of germ cells
Based on available data, the classification criteria are not met.
f) carcinogenicity
Based on available data, the classification criteria are not met.
g) reproductive toxicity
The product is classified: Repr. 2 H361d
h) specific target organ toxicity (STOT) – single exposure
The product is classified: STOT SE 3, H335
(i) specific target organ toxicity (STOT) – repeated exposure
The product is classified: STOT RE 1, H372
j) danger in case of aspiration
Based on available data, the classification criteria are not met.

11.2 Information on other hazards
Flammable product

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Endpoint	Duration test (hours)	Species	ValueDimethyl ether
Styrene			
NOEC (ECx)	96h	Algae	0.063mg/l
LC50	96h	Fish	4.02mg/l
EC50	72h	Algae	1.4mg/l
EC50	48h	Crustaceans	4.7mg/l
EC50	96h	Algae	0.72mg/l

12.2 Persistence and degradability
STYRENE
Solubility in water 320 mg/l
Rapidly degradable

12.3 Bioaccumulative potential
STYRENE
Partition coefficient: n-octanol/water 2.96
BCF 74

12.4 Mobility in soil

Ingredient	Mobility
Styrene	LOW (KOC = 517.8)

12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain PBT or vPvB substances in percentage greater than 0.1%.

12.6 Endocrine disrupting properties
No data available

12.7 Other adverse effects
No data 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. Avoid littering. Do not contaminate soil, sewers and waterways. 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.
CER code: 08 01 11 – Waste paints and varnishes, containing organic solvents or other dangerous substances.

Type of residue (Regulation (EU) No. 1357/2014
HP14 Ecotoxic, HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, HP10 Reproductive Toxic, HP4 Irritant.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number
ADR-UN number: 1866
IATA-Un number: 1866
IMDG-Un number: 1866

14.2 UN proper shipping name
ADR-Shipping Name: RESIN SOLUTION, flammable
IATA-Technical name: RESIN SOLUTION, flammable
IMDG-Technical name: RESIN SOLUTION, flammable

14.3 Transport hazard class(es)



ADR-Class: 3
ADR-Label: 3
ADR - Hazard identification number: -
IATA-Class: 3
IATA-Label: 3
IMDG-Class: 3

14.4 Packing group
ADR / RID, IMDG, III

14.5 Environmental hazards
Marine pollutant: No

14.6 Special precautions for user
ADR-S.P.: 640E
ADR-Tunnel restriction code: (D/E)
IATA-Passenger Aircraft: 309
IATA-Cargo Aircraft: 310

IATA-ERG: 3L
IMDG-EMS: F-E, S-E
IMDG-Storage category: A

14.7 Maritime transport in bulk according to IMO instruments
Information not relevant.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.
Seveso Category - Directive 2012/18/EC:
P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.
Restrictions related to the product:
Restriction 3
Restriction 40
Restrictions relating to the substances contained:
Substances contained
Point 75 STYRENE
Reg. No.: 01-2119457861-32

Substances subject to authorisarion (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.

Volatile Organic Compounds - VOC = 640 g / l
Volatile Organic Compounds - VOC = 85%
This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions and significant disappearances and thefts must be reported to the national contact point qualified.

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for the mixture

SECTION 16: OTHER INFORMATION

Full text of H codes mentioned in sections 2 - 3
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H360 May damage fertility or the unborn child
H361d Suspected of damaging the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic organisms
H412 Harmful to aquatic organisms 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.

Classification and procedure used to derive it according to regulation (EC) 1272/2008 [CLP] in relation to mixture:

Flam. Liq. 3 H226 - Metodo di calcolo
Skin Irrit. 2 H315 - Metodo di calcolo
Eye Irrit. 2 H319 - Metodo di calcolo
STOT SE 3 H335 - Metodo di calcolo
Repr. 2 H361d - Metodo di calcolo
STOT RE 1 H372 - Metodo di calcolo
Aquatic Chronic 3 H412 - Metodo di calcolo

GENERAL BIBLIOGRAPHY

Regulation (EU) 1907/2006 of the European Parliament (REACH)
Regulation (EU) 1272/2008 of the European Parliament (CLP)
Regulation (EU) 2020/878 (Annex II REACH Regulation)
Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
Regulation (EU) 2016/1179 (IX Atp. CLP)
Regulation (EU) 2017/776 (X Atp. CLP)
Regulation (EU) 2018/669 (XI Atp. CLP)
Regulation (EU) 2019/521 (XII Atp. CLP)
Delegated Regulation (EU) 2018/1480 (XIII Atp. CLP)
Regulation (EU) 2019/1148
Delegated Regulation (EU) 2020/217 (XIV Atp. CLP)
Delegated Regulation (EU) 2020/1182 (XV Atp. CLP)
Delegated Regulation (EU) 2021/643 (XVI Atp. CLP)
Delegated Regulation (EU) 2021/849 (XVII Atp. CLP)
Delegated Regulation (EU) 2022/692 (XVIII Atp. CLP)
Regulation (EU) 2020/878 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:
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

Changes compared to the previous version:
01/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16