



ILPA ADESIVI SRL

Revision nr. 2

Dated 24/06/2021

Printed on 24/06/2021

Page n. 1/14

Replaced revision:1 (Printed on: 06/10/2016)

M5107 – LEVANTE – RESINA EPOSSIDICA

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **M5107**
Product name: **LEVANTE – RESINA EPOSSIDICA**

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

Intended use: **Epoxy resin, Professional use only.**

Uses advised against: no one in particular

1.3. Details of the supplier of the safety data sheet

Name: **ILPA ADESIVI SRL**
Full address: **Via Ferorelli, 4**
District and Country: **70132 BARI (BARI)
ITALIA**
Tel. + **39 0805383837**
Fax + **39 0805377807**

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

1.4. Emergency telephone number

For urgent inquiries refer to: **+ 39 0808974667 (Technical support - 8,00 - 17,00 - LUN-VEN; MON-FRI)(Italian time zone)**
Safety Executive (HSE) Chemicals Regulation Directorate 5S.1 Redgrave Court, Merton Road, Bootle, Merseyside. L20 7HS.
Phone: +44 151 9513317

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2 **H319** Causes serious eye irritation.

**M5107 – LEVANTE – RESINA EPOSSIDICA**

Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms:



Signal words: Warning

Hazard statements:

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P280	Wear protective gloves / eye protection / face protection.
P308+P313	IF exposed or concerned: Get medical advice / attention.
P370+P378	In case of fire: useuse carbon dioxide, foam, chemical powder to extinguish.

Contains: REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
1,6 Hexanediol Diglycidyl Ether

Product not intended for uses provided for by Dir. 2004/42/CE.

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients**3.2. Mixtures**

Contains:

**M5107 – LEVANTE – RESINA EPOSSIDICA**

Identification	x = Conc. %	Classification 1272/2008 (CLP)
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)		
CAS 25068-38-6	78 ≤ x < 82	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC 500-033-5		
INDEX 603-074-00-8		
Reg. no. 01-2119456619-26		
1,6 Hexanediol Diglycidyl Ether		
CAS 16096-31-4	19,5 ≤ x < 21	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 3 H412
EC 240-260-4		
INDEX -		
Reg. no. 01-2119463471-41		

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

SECTION 4. First aid measures

4.1. Description of first aid measures

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

SKIN: Remove contaminated clothing. 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.

PROTECTIVE MEASURES FOR THE FIRST RESCUE WORKERS: for PPE (personal protection equipment) required for first aid refer to section 8.2 of this safety data sheet.

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

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

**M5107 – LEVANTE – RESINA EPOSSIDICA****5.2. Special hazards arising from the substance or mixture****HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Do not breathe combustion products.

5.3. Advice for firefighters**GENERAL INFORMATION**

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

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

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

Block the leakage if there is no hazard.

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

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

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

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

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. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)



No use other than specified in Section 1.2 of this safety data sheet.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,006	mg/l
Normal value in marine water	0,001	mg/l
Normal value for fresh water sediment	0,996	mg/kg/d
Normal value for marine water sediment	1	mg/kg/d
Normal value for water, intermittent release	0,018	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,196	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	0,75 mg/kg bw/d	VND	0,75 mg/kg bw/d				
Inhalation	NPI	VND	NPI	VND	NPI	12,25 mg/m3	NPI	12,25 mg/m3
Skin	VND	3,571 mg/kg bw/d	NPI	3,571 mg/kg bw/d	VND	8,33 mg/kg bw/d	NPI	8,33 mg/kg bw/d

1,6 Hexanediol Diglycidyl Ether

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,011	mg/l
Normal value in marine water	0,001	mg/l
Normal value for fresh water sediment	0,283	mg/kg/d
Normal value for marine water sediment	0,028	mg/kg/d
Normal value for water, intermittent release	0,115	mg/l
Normal value of STP microorganisms	1	mg/l
Normal value for the terrestrial compartment	0,223	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	0,83 mg/kg bw/d	VND	0,83 mg/kg bw/d				
Inhalation	VND	2,9 mg/m3	0,27 mg/m3	2,9 mg/m3	VND	4,9 mg/m3	0,44 mg/m3	4,9 mg/m3
Skin	0,014 mg/cm2	1,7 mg/kg bw/d	0,014 mg/cm2	1,7 mg/kg bw/d	0,023 mg/cm2	VND	0,023 mg/cm2	2,8 mg/kg bw/d

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

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

**M5107 – LEVANTE – RESINA EPOSSIDICA**

When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

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

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

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

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

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

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

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

ENVIRONMENTAL EXPOSURE CONTROLS

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

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

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

Appearance	viscous liquid	
Colour	colourless	
Odour	mild	
Odour threshold	Not available	
pH	Not applicable	
Melting point / freezing point	Not available	Substance:1,6 Hexanediol Diglycidyl Ether Temperature:-23,7°C (at 101 kPa)
Initial boiling point	Not available	Substance:1,6 Hexanediol Diglycidyl Ether Temperature:284°C (at 101 kPa)
Boiling range	Not available	
Flash point	> 93 °C	
Evaporation rate	Not available	
Flammability (solid, gas)	not applicable	
Lower inflammability limit	Not available	
Upper inflammability limit	Not available	

**M5107 – LEVANTE – RESINA EPOSSIDICA**

Lower explosive limit	Not available	
Upper explosive limit	Not available	
Vapour pressure	Not available	Concentration:0,042 Pa (at 40°C) Substance:1,6 Hexanediol Diglycidyl Ether
Vapour density	Not available	
Relative density	1,08 g/ml	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	Concentration:LogPow 0,822 (at 20°C) Substance:1,6 Hexanediol Diglycidyl Ether
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	800 ± 100 mPas (T=25°C)	Remark:Kinematic viscosity>20,5 mm ² /s, (at 40°C)
Explosive properties	Product does not present an explosion hazard.	
Oxidising properties	not applicable	

9.2. Other information

Information not available

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

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

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

**M5107 – LEVANTE – RESINA EPOSSIDICA**

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 effectsMetabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

LD50 (Oral) > 2000 mg/kg rat, according to (OECD Guideline 420)

LD50 (Dermal) > 2000 mg/kg rat, according to (OECD Guideline 402)

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

**M5107 – LEVANTE – RESINA EPOSSIDICA**

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: 800 ± 100 mPas (T=25°C)

SECTION 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 aquatic environment.

12.1. Toxicity

REACTION PRODUCT: BISPHENOL A-
(EPICHLORHYDRIN)

LC50 - for Fish

1,2 mg/l/96h Oncorhynchus mykiss (Equivalent or similar to EPA-660/3-75-009)

EC50 - for Crustacea

2,7 mg/l/48h Daphnia magna (Equivalent or similar to EPA-660/3-75-009)

EC50 - for Algae / Aquatic Plants

9,4 mg/l/72h Scenedesmus capricornutum (Equivalent or similar to EPA-660/3-75-009)

1,6 Hexanediol Diglycidyl Ether

LC50 - for Fish

30 mg/l/96h Oncorhynchus mykiss, Prova semistatica (Rif. SDS DOW)

EC50 - for Crustacea

47 mg/l/48h Test effettuato a 24h, Daphnia Magna, prova statica, immobilizzazione, (Rif. SDS DOW)

EC50 - for Algae / Aquatic Plants

23,1 mg/l/72h Selenastrum capricornutum, (from ECHA site)

12.2. Persistence and degradability

REACTION PRODUCT: BISPHENOL A-
(EPICHLORHYDRIN)

Solubility in water

0,1 - 100 mg/l

NOT rapidly degradable

**M5107 – LEVANTE – RESINA EPOSSIDICA**

1,6 Hexanediol Diglycidyl Ether

NOT rapidly degradable

12.3. Bioaccumulative potential

REACTION PRODUCT: BISPHENOL A-
(EPICHLORHYDRIN)

Partition coefficient: n-octanol/water > 2,918

BCF 31

1,6 Hexanediol Diglycidyl Ether

BCF 822 (OECD 107)

12.4. Mobility in soil

REACTION PRODUCT: BISPHENOL A-
(EPICHLORHYDRIN)

Partition coefficient: soil/water 2,65

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

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

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

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

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

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

ADR / RID, IMDG, IATA: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity \leq 5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity \leq 5Kg or 5L, is not submitted to IMDG Code provisions.

**M5107 – LEVANTE – RESINA EPOSSIDICA**

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity \leq 5Kg or 5L, is not submitted to IATA dangerous goods regulations.

14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contens: REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN) (PMW \leq 700, 1,6 Hexanediol Diglycidyl Ether) MIXTURE
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contens: REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN) (PMW \leq 700, 1,6 Hexanediol Diglycidyl Ether) MIXTURE
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contens: REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN) (PMW \leq 700, 1,6 Hexanediol Diglycidyl Ether) MIXTURE

14.3. Transport hazard class(es)

ADR / RID: Class: 9 Label: 9
IMDG: Class: 9 Label: 9
IATA: Class: 9 Label: 9

**14.4. Packing group**

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous
IMDG: Marine Pollutant
IATA: Environmentally Hazardous

**14.6. Special precautions for user**

ADR / RID:	HIN - Kemler: 90	Limited Quantities: 5 L	Tunnel restriction code: (E)
	Special provision: -		
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Pass.:	Maximum quantity: 450 L	Packaging instructions: 964
	Special provision:	A97, A158, A197	

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

Information not relevant

**M5107 – LEVANTE – RESINA EPOSSIDICA****SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso Category - Directive 2012/18/EC: E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3. Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/ 2008:
(a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;
(b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;
(c) hazard class 4.1;
(d) hazard class 5.1.

Contained substance

Point 75 REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN) Reg. no.:
01-2119456619-26

Regulation (EC) No. 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

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

**M5107 – LEVANTE – RESINA EPOSSIDICA****15.2. Chemical safety assessment**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

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

Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

LEGEND:

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

GENERAL BIBLIOGRAPHY

**M5107 – LEVANTE – RESINA EPOSSIDICA**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
 16. Regulation (EU) 2019/521 (XII Atp. CLP)
 17. Regulation (EU) 2019/1148
 18. Regulation (EU) 2020/217 (XIV Atp. CLP)
- 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
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) – Italy

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

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Training for workers:

Worker training should include content, updates and duration depending on the risk profiles assigned to the business sectors they belong

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 08 / 09 / 11 / 12 / 14 / 15.