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: **C6100**

Product name **LEVANTE MAX – NEW LIGHT (PARTE B)**

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

Intended use **Hardener for acrylic clearcoat low VOC. Professional use only.**

Uses advised against: none in particular.

Uses related to the substances present:

Identified Uses	Industrial	Professional	Consumer
2-METHOXY-1-METHYLETHYL ACETATE	-	ERC: 8a, 8c, 8d. PROC: 1, 10, 11, 13, 15, 19, 2, 3, 4, 5, 8a, 8b, 9.	-
Butyl acetate	-	ERC: 7, 8a. PROC: 1, 10, 11, 13, 15, 19, 2, 3, 4, 5, 8a, 8b.	-

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:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Acute toxicity, category 3	H331	Toxic if inhaled.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

2.2. Label elements

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

Hazard pictograms:

Signal words: Danger

Hazard statements:

H226	Flammable liquid and vapour.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P280	Wear protective gloves / eye protection / face protection.
P311	Call a POISON CENTER / doctor in case of malaise
P370+P378	In case of fire: useuse carbon dioxide, foam, chemical powder to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Contains:	ALIPHATIC POLYISOCYANATE 2-METHOXY-1-METHYLETHYL ACETATE HEXAMETHYLEN-1,6-DIISOCYANATE

N-BUTYL ACETATE

As from 24 August 2023 adequate training is required before industrial or professional use.
VOC (Directive 2004/42/EC) :

Topcoat - base coatings - clear coating.

VOC given in g/litre of product in a ready-to-use condition :	416,00
Limit value:	420,00

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
ALIPHATIC POLYISOCYANATE		
CAS 28182-81-2	45 ≤ x < 47,5	Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1 H317
EC		
INDEX -		
2-METHOXY-1-METHYLETHYL ACETATE		
CAS 108-65-6	27 ≤ x < 28,5	Flam. Liq. 3 H226, STOT SE 3 H336
EC 203-603-9		
INDEX 607-195-00-7		
Reg. no. 01-2119475791-29		
N-BUTYL ACETATE		
CAS 123-86-4	16,5 ≤ x < 18	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC 204-658-1		
INDEX 607-025-00-1		
Reg. no. 01-2119485493-29		
REACTION MASS of ethylbenzene and xylene		
CAS -	7 ≤ x < 8	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note/notes according to Annex VI to the CLP Regulation: C
EC 905-588-0		
INDEX -		
HEXAMETHYLEN-1,6-DIISOCYANATE		
CAS 822-06-0	0,2 ≤ x < 0,25	Acute Tox. 1 H330, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317, Classification

note/notes according to Annex VI to the CLP Regulation: 2

EC -

INDEX 615-011-00-1

Reg. no. 01-2119457571-37-XXXX

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. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly 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
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 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.

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.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

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

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. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. 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)

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

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GRC	Ελλάδα	ΕΦΗΜΕΡΙΔΑ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 152 - 21 Αυγούστου 2018
HRV	Hrvatska	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 91/18)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Regeling van de Staatssecretaris van Sociale Zaken en Werkgelegenheid van 13 juli 2018, 2018-0000118517 tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2017/164 in Bijlage XIII
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
EU	OEL EU	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 2020

2-METHOXY-1-METHYLETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
TLV	GRC	275	50	550	100	
GVI/KGVI	HRV	275	50	550	100	SKIN
VLEP	ITA	275	50	550	100	SKIN
TGG	NLD	550				
VLE	PRT	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	SKIN
OEL	EU	275	50	550	100	SKIN

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,635	mg/l
Normal value in marine water	0,0635	mg/l
Normal value for fresh water sediment	3,29	mg/kg
Normal value for marine water sediment	0,329	mg/kg
Normal value for water, intermittent release	6,35	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	0,29	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic

Oral		VND	36 mg/kg bw/d		796	796 mg/kg bw/d
Inhalation		VND	33 mg/m3	550 mg/m3	VND	275 mg/m3
Skin		VND	320 mg/kg bw/d		VND	153,5 mg/kg bw/d

N-BUTYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	300	62	600 (C)	124 (C)	
VLA	ESP	724	150	965	200	
VLEP	FRA	710	150	940	200	
TLV	GRC	710	150	950	200	
GVI/KGVI	HRV	724	150	966	200	
TGG	NLD	150				
WEL	GBR	724	150	966	200	
OEL	EU	241	50	723	150	
TLV-ACGIH			50		150	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,18	mg/l
Normal value in marine water	0,018	mg/l
Normal value for fresh water sediment	0,981	mg/kg/d
Normal value for marine water sediment	0,0981	mg/kg/d
Normal value for water, intermittent release	0,36	mg/l
Normal value of STP microorganisms	35,6	mg/l
Normal value for the terrestrial compartment	0,0903	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation	859,7 mg/m3	859,7 mg/m3	102,34 mg/m3	102,34 mg/m3	960 mg/m3	960 mg/m3	480 mg/m3	480 mg/m3

REACTION MASS of ethylbenzene and xylene

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
TLV	GRC	435	100	650	150	
GVI/KGVI	HRV	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	SKIN

TGG	NLD	210		442		SKIN
VLE	PRT	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg/d
Normal value for marine water sediment	12,46	mg/kg/d
Normal value for water, intermittent release	0,327	mg/l
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	12,5 mg/kg bw/d				
Inhalation	260 mg/m3	260 mg/m3	VND	65,3 mg/m3	442 mg/m3	442 mg/m3	VND	221 mg/m3
Skin			VND	125 mg/kg bw/d			VND	212 mg/kg bw/d

HEXAMETHYLEN-1,6-DIISOCYANATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	0,035	0,005	0,035	0,005	
MAK	DEU	0,035	0,005	0,035	0,005	
VLA	ESP	0,035	0,005			
VLEP	FRA	0,075	0,01	0,15	0,02	
WEL	GBR	0,02		0,07		
TLV-ACGIH		0,034	0,005			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,077	mg/l
Normal value in marine water	0,008	mg/l
Normal value for fresh water sediment	0,013	mg/kg/d
Normal value for marine water sediment	0,001	mg/kg/d
Normal value for water, intermittent release	0,774	mg/l
Normal value of STP microorganisms	8,42	mg/l
Normal value for the terrestrial compartment	0,003	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic

Inhalation	0,07 mg/m3	0,07 mg/m3	0,035 mg/m3	0,035 mg/m3
Skin	VND	VND	VND	VND

Legend:

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

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.
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.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid

Colour	colourless	
Odour	aromatic	
Odour threshold	Not available	Concentration:0,5 - 1,0 ppm Substance:REACTION MASS of ethylbenzene and xylene
pH	Not applicable	Reason for missing data:solvent base product,
Melting point / freezing point	Not available	Temperature:13,2 (p-XYLENE); -49,9°C (m-XYLENE); -25,2°C (o-XYLENE)
Initial boiling point	Not available	
Boiling range	Not available	Temperature:135-145°C (PUBCHEM CID:6850715)
Flash point	23 ≤ T ≤ 60 °C	
Evaporation rate	Not available	Concentration:0,75 (butyl acetate =1) Substance:REACTION MASS of ethylbenzene and xylene
Flammability (solid, gas)	not applicable	
Lower inflammability limit	Not available	Concentration:Vol% 1,1 (p-XYLENE, m-XYLENE); 0,9 (o-XYLENE)
Upper inflammability limit	Not available	Concentration:Vol% 7 (p-XYLENE, m-XYLENE); 6,7 (o-XYLENE)
Lower explosive limit	Not available	Concentration:Vol% 1,1 (p-XYLENE, m-XYLENE); 0,9 (o-XYLENE)
Upper explosive limit	Not available	Concentration:Vol% 7 (p-XYLENE, m-XYLENE); 6,7 (o-XYLENE)
Vapour pressure	Not available	Concentration:0,186 PSI (T=26,6°C, p-XYLENE); 0,207 PSI (T=29,4°C, m-XYLENE); 0,194 PSI (T=32,2, o-XYLENE)
Vapour density	Not available	Concentration:3,7 (air=1, T=20°C, font ICSC)) Substance:REACTION MASS of ethylbenzene and xylene
Relative density	1 Kg/l	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	Concentration:LOG POW (3,15 p-XYLENE; 3,2 m-XYLENE; 3,12 o-XYLENE) T=20°C
Auto-ignition temperature	Not available	Temperature:528°C (p-XYLENE); 527°C (m-XYLENE); 463°C (o-XYLENE) (1 Bar)
Decomposition temperature	Not available	
Viscosity	100 cPs (T = 20 °C)	
Explosive properties	Product does not present an explosion hazard.	
Oxidising properties	not available	

9.2. Other information

VOC (Directive 2004/42/EC) : 99,75 % - 997,45 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

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

2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

N-BUTYL ACETATE

Decomposes on contact with: 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.

2-METHOXY-1-METHYLETHYL ACETATE

May react violently with: oxidising substances,strong acids,alkaline metals.

N-BUTYL ACETATE

Risk of explosion on contact with: strong oxidising agents.May react dangerously with: alkaline hydroxides,potassium tert-butoxide.Forms explosive mixtures with: air.

REACTION MASS of ethylbenzene and xylene

Stable in normal conditions of use and storage.Reacts violently with: strong oxidants,strong acids,nitric acid,perchlorates.May form explosive mixtures with: air.

10.4. Conditions to avoid

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

N-BUTYL ACETATE

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

10.5. Incompatible materials

2-METHOXY-1-METHYLETHYL ACETATE

Incompatible with: oxidising substances,strong acids,alkaline metals.

N-BUTYL ACETATE

Incompatible with: water,nitrates,strong oxidants,acids,alkalis,zinc.

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.

SECTION 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

2-METHOXY-1-METHYLETHYL ACETATE

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Information on likely routes of exposure

2-METHOXY-1-METHYLETHYL ACETATE

WORKERS: inhalation; contact with the skin.

N-BUTYL ACETATE

WORKERS: inhalation; contact with the skin.

REACTION MASS of ethylbenzene and xylene

WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

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

2-METHOXY-1-METHYLETHYL ACETATE

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

N-BUTYL ACETATE

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

REACTION MASS of ethylbenzene and xylene

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

Interactive effects

N-BUTYL ACETATE

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

REACTION MASS of ethylbenzene and xylene

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

ATE (Inhalation) of the mixture:
9,95 mg/l
ATE (Oral) of the mixture:
Not classified (no significant component)
ATE (Dermal) of the mixture:
>2000 mg/kg

REACTION MASS of ethylbenzene and xylene

LD50 (Oral) 3523 mg/kg Rat (equivalent or similar to EU Method B.1)

LD50 (Dermal) 4200 mg/kg Rabbit (Industrial Medicine 39, 215-200, 1970)

LC50 (Inhalation) 26 mg/l/4h Rat(equivalent or similar to EU Method B.2)

ALIPHATIC POLYISOCYANATE

LD50 (Oral) > 5000 mg/kg rat, (SDS Covestro)

LD50 (Dermal) > 2000 mg/kg rabbit M/F, (SDS Covestro)

LC50 (Inhalation) 0,554 mg/l/4h test atmosphere: dust / mist, (SDS Covestro)

2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral) > 5000 mg/kg Rat (male), SDS supplier

LD50 (Dermal) > 5000 mg/kg Rabbit, SDS supplier

N-BUTYL ACETATE

LD50 (Oral) 10760 mg/kg Rat (Equivalent or similar to OECD Guideline 423)

LD50 (Dermal) 14112 mg/kg Rabbit (Equivalent or similar to OECD Guideline 402)

LC50 (Inhalation) 5,3 mg/l/4h Rat (Equivalent or similar to OECD Guideline 423)

HEXAMETHYLEN-1,6-DIISOCYANATE

LD50 (Oral) 746 mg/kg rat, equivalent or similar to (OECD Guideline 401)

LD50 (Dermal) > 7000 mg/kg rat, according to (OECD Guideline 402)

LC50 (Inhalation) 124 mg/l/4h rat, according to (OECD Guideline 403)

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Skin sensitization
ALIPHATIC POLYISOCYANATE

skin sensitisation: Magnusson/Kligmann
guinea pig
Interpretation of results: sensitising
CLP: Category 1A
according to Guideline:OECD Guideline 406 (Skin Sensitisation)

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REACTION MASS of ethylbenzene and xylene

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation
May cause drowsiness or dizziness

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: 100 cPs (T = 20 °C)

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

REACTION MASS of ethylbenzene and xylene	
LC50 - for Fish	2,6 mg/l/96h Oncorhynchus mykiss (OECD TG 203)
Chronic NOEC for Fish	1,3 mg/l 56d Oncorhynchus mykiss (Appl. Sci. Branch, Eng. Res. Cent. Denver, CO: 15p.)
Chronic NOEC for Crustacea	1,17 mg/l 7d Ceriodaphnia dubia (Ecotoxicology and Environmental Safety 39, 136-146)
ALIPHATIC POLYISOCYANATE	
LC50 - for Fish	> 100 mg/l/96h Danio rerio, (Dir. 67/548/CEE, Annex V, C.1, by SDS Covestro)
EC50 - for Crustacea	> 100 mg/l/48h Daphnia Magna, (Dir. 67/548/CEE, annex V, C.2, by SDS Covestro)
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h scenedesmus subspicatus, (Dir. 67/548/CEE annex V, C.3, by SDS Covestro)
2-METHOXY-1-METHYLETHYL ACETATE	
LC50 - for Fish	134 mg/l/96h Oncorhynchus mykiss (OECD Guideline 203)
EC50 - for Crustacea	500 mg/l/48h Daphnia magna (EU Method C.2)
Chronic NOEC for Fish	47,5 mg/l OCSE 204
Chronic NOEC for Algae / Aquatic Plants	> 1000 mg/l SDS supplier
N-BUTYL ACETATE	
LC50 - for Fish	18 mg/l/96h Pimephales promelas (Equivalent or similar to OECD Guideline 203)
EC50 - for Crustacea	44 mg/l/48h Daphnia sp. (Publication, 1959, no guideline followed)

EC50 - for Algae / Aquatic Plants	648 mg/l/72h Desmodesmus subspicatus (Umweltbundesamt - German Federal Environment Agency)
Chronic NOEC for Crustacea	23 mg/l Daphnia magna, 21 d (Read-across from supporting substance, OECD Guideline 211)

HEXAMETHYLEN-1,6-DIISOCYANATE

EC50 - for Algae / Aquatic Plants	> 77,4 mg/l/72h Scenedesmus subspicatus, according to (EU Method C.3)
Chronic NOEC for Algae / Aquatic Plants	11,7 mg/l Scenedesmus subspicatus, according to (EU Method C.3)

12.2. Persistence and degradability

REACTION MASS of ethylbenzene and xylene

Solubility in water	100 - 1000 Handbook of aqueous solubility data. mg/l

Rapidly degradable
OECD Guideline 301 F, GLP

ALIPHATIC POLYISOCYANATE

Solubility in water	0,1 - 100 mg/l

NOT rapidly degradable

1%, 28d,(Dir. 67/548/CEE, annex V, C.4.E., by SDS Covestro)

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water	> 10000 mg/l

Rapidly degradable
(OECD Guideline 301 F, GLP)

N-BUTYL ACETATE

Solubility in water	1000 - 10000 mg/l

Rapidly degradable
OECD Guideline 301 D

HEXAMETHYLEN-1,6-DIISOCYANATE

NOT rapidly degradable

12.3. Bioaccumulative potential

REACTION MASS of ethylbenzene and xylene

Partition coefficient: n-octanol/water	3,12 American Chemical Society, Washington DC
BCF	25,9 Appl. Sci. Branch, Eng. Res. Cent. Denver, CO: 15p.

ALIPHATIC POLYISOCYANATE

Partition coefficient: n-octanol/water	5,54
BCF	367,7

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water	1,2

N-BUTYL ACETATE

Partition coefficient: n-octanol/water	2,3 a 25 °C (Metodo OECD TG 117)
BCF	15,3

HEXAMETHYLEN-1,6-DIISOCYANATE

Partition coefficient: n-octanol/water	3,2 Log Kow Calculation by KOWWIN v1.67 © 2000 U.S. Environmental Protection Agency
BCF	3,2 Calculated using BCF Program v2.17 of EPI-Suite software

12.4. Mobility in soil

REACTION MASS of ethylbenzene and xylene

Partition coefficient: soil/water	2,73 equivalent or similar to OECD Guideline 121

ALIPHATIC POLYISOCYANATE

Partition coefficient: soil/water	7,3

N-BUTYL ACETATE

Partition coefficient: soil/water	< 3

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 ≥ 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: 1263

14.2. UN proper shipping name

ADR / RID:	PAINT or PAINT RELATED MATERIAL (Contens: N-BUTYL ACETATE, XYLENE (MIXTURE OF ISOMERS)) MIXTURE
IMDG:	PAINT or PAINT RELATED MATERIAL (Contens: N-BUTYL ACETATE, XYLENE (MIXTURE OF ISOMERS)) MIXTURE
IATA:	PAINT or PAINT RELATED MATERIAL (Contens: N-BUTYL ACETATE, XYLENE (MIXTURE OF ISOMERS)) MIXTURE

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: III

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
	Special Provision: -		
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special Instructions:	A3, A72, A192	

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

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: P5b

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. 40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.

Contained substance

Point	20	DIBUTYLTIN DILAURATE Reg. no.: 01-2119496068-27
Point	74	DIISOCYANATES

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ 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.

VOC (Directive 2004/42/EC) :

Topcoat - base coatings - clear coating.

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:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 1	Acute toxicity, category 1
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Sens. 1	Skin sensitization, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H226	Flammable liquid and vapour.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.

Use descriptor system:

ERC	**7**	Use of functional fluid at industrial site
ERC	**8a**	Widespread use of non- reactive processing aid (no inclusion into or onto article, indoor)
ERC	**8c**	Widespread use leading to inclusion into/onto article (indoor)
ERC	**8d**	Widespread use of non- reactive processing aid (no inclusion into or onto article, outdoor)
PROC	**1**	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC	**10**	Roller application or brushing
PROC	**11**	Non industrial spraying
PROC	**13**	Treatment of articles by dipping and pouring
PROC	**15**	Use as laboratory reagent
PROC	**19**	Manual activities involving hand contact
PROC	**2**	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC	**3**	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC	**4**	Chemical production where opportunity for exposure arises
PROC	**5**	Mixing or blending in batch processes
PROC	**8a**	Transfer of substance or mixture (charging and discharging) at non- dedicated facilities
PROC	**8b**	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC	**9**	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

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
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2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
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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
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11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
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16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
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- IFA GESTIS website
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Istituto Superiore di Sanità (ISS) – Archivio Preparati Pericolosi
Codice azienda: IT00465900728
Ragione sociale: Ilpa Adesivi Srl
Nome prodotto ISS: C6100
Codice prodotto ISS: C6100

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

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Flam. Liq. 3, H226	Calculation method
Acute Tox. 3, H331	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
Skin Sens. 1, H317	Calculation method

Changes to previous review:
The following sections were modified:
01 / 02 / 03 / 04 / 06 / 08 / 09 / 10 / 11 / 12 / 14 / 15 / 16.