

Printing date 09/07/2022

Version number 117

Reviewed on 09/07/2022

1 Identification

- · Product identifier
 - · Product number TO97
 - Trade name: <u>CLEAR PU TOP-COAT 5SH</u> • Application of the substance / the mixture For professional use
- · Details of the supplier of the safety data sheet
 - Manufacturer/Supplier: IVM Chemicals Srl
 Viale della Stazione 3 -27020 Parona (PV)Italy -Tel +39 038425441
 - Information department: Environmental Health and safety office hseoffice @ivmchemicals.com
 - Emergency telephone number: ChemTel Expert Assistance Hotline/SDS Fax Access by dialing 1-800-255-3924 or for International +1-813-248-0585.

2 Hazard(s) identification

· Classification of the substance or mixture	
Flammable Liquids 2	H225 Highly flammable liquid and vapor.
Skin Irrititation 2	H315 Causes skin irritation.
Eye Irritation 2A	H319 Causes serious eye irritation.
Carcinogenicity 2	H351 Suspected of causing cancer.
Specific Target Organ Toxicity - Single Exposu	re 3H335 May cause respiratory irritation.
Specific Target Organ Toxicity - Repeated Exposure 2	H373 May cause damage to the hearing organs through prolonged or repeated exposure.

Aquatic Acute 3 Aquatic Chronic 3 through prolonged or repeated exposure. Route of exposure: Oral, Inhalation. H402 Harmful to aquatic life. H412 Harmful to aquatic life with long lasting effects.

· Label elements

- · GHS label elements
 - The product is classified and labeled according to the Globally Harmonized System (GHS). • Hazard pictograms



· Signal word Danger

Hazard-determining components of labeling: xylene
ethylbenzene
Hazard statements
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.

H373 May cause damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

H402 Harmful to aquatic life.

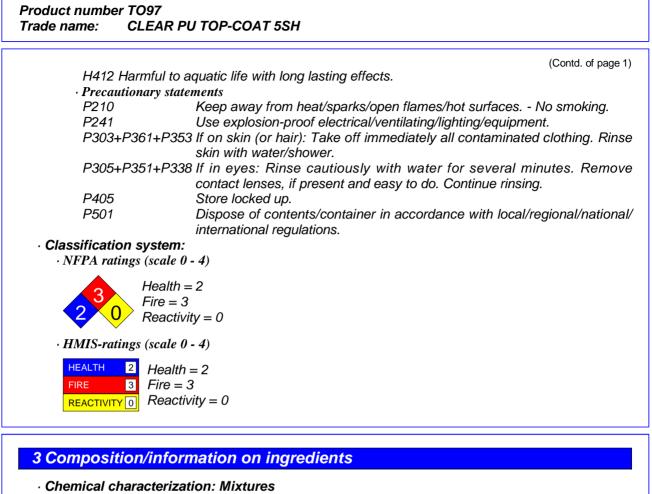
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· Description: Mixture: consisting of the following components.

1330-20-7	xylene	30-39.99%
	 Flammable Liquids 3, H226 Specific Target Organ Toxicity - Repeated Exposure 2, H373; Aspiration Hazard 1, H304 Acute Toxicity - Dermal 4, H312; Acute Toxicity - Inhalation 4, H332; Skin Irrititation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335 Aquatic Acute 3, H402; Aquatic Chronic 3, H412 	
100-41-4	 ethylbenzene Flammable Liquids 2, H225 Carcinogenicity 2, H351; Specific Target Organ Toxicity - Repeated Exposure 2, H373; Aspiration Hazard 1, H304 Acute Toxicity - Inhalation 4, H332 Aquatic Chronic 3, H412 	5-9.99%
110-19-0	isobutyl acetate Flammable Liquids 2, H225 Specific Target Organ Toxicity - Single Exposure 3, H336 	2.5-4.99%
108-65-6	 2-methoxy-1-methylethyl acetate Flammable Liquids 3, H226 Specific Target Organ Toxicity - Single Exposure 3, H336 	1-2.49%



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123-86-4	n-butyl acetate	1-2.49%
	 Flammable Liquids 3, H226 Specific Target Organ Toxicity - Single Exposure 3, H336 	
141-78-6	ethyl acetate	0.5-1%
	 Flammable Liquids 2, H225 Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336 	
64-17-5	ethanol	0.5-1%
	 Flammable Liquids 2, H225 Eye Irritation 2A, H319 	

4 First-aid measures

· Description of first aid measures

- · General information:
- Immediately remove any clothing soiled by the product.
- Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

personal protective equipment for first aid responders is recommended. (please see section 8) · *After inhalation:*

- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
- Immediately wash with water and soap and rinse thoroughly.

Take off immediately all contaminated clothing, include underwear and shoes (if necessary). Rinse thoroughly with plenty of water for at least 20 minutes and take medical advise. If medical advise is needed have products container or label at hand.

• After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist , consult a doctor.

- · After swallowing: Do not induce vomiting; immediately call for medical help.
- · Information for doctor:
 - Most important symptoms and effects, both acute and delayed
 - For symptoms and effects caused by substances, refer to Section 11.
 - Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
 - · Suitable extinguishing agents:
 - Alcohol resistant foam
 - Alcohol resistant foam, CO, powder, water spray/mist.

 \cdot For safety reasons unsuitable extinguishing agents:

Do not use a jet water stream as it may scatter and spread fire.

• Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced. In case of fire, the following can be released: Nitrogen oxides (NOx) Carbon monoxide (CO)

Advice for firefighters

Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.

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· P	Prot	ecti	ve	equip	ment:

Hardhat with visor, fireproof clothing, suitable gloves and if necessary respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Mount respiratory protective device. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Keep away from ignition sources Environmental precautions: Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water. · Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to Section 13. Ensure adequate ventilation. · Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information. · Protective Action Criteria for Chemicals · PAC-1: 1330-20-7 xylene 130 ppm 100-41-4 ethylbenzene 33 ppm 7631-86-9 silicon dioxide, chemically prepared $18 mg/m^{3}$ 110-19-0 isobutvl acetate 450 ppm 108-65-6 2-methoxy-1-methylethyl acetate 50 ppm 123-86-4 n-butyl acetate 5 ppm 141-78-6 ethyl acetate 1,200 ppm 9002-88-4 Polyethylene low density $16 mg/m^{3}$ 64-17-5 ethanol 1,800 ppm · PAC-2: 1330-20-7 xylene 920* ppm 100-41-4 ethylbenzene 1100* ppm 7631-86-9 silicon dioxide, chemically prepared 740 mg/m³ 110-19-0 isobutyl acetate 1300* ppm 108-65-6 2-methoxy-1-methylethyl acetate 1,000 ppm 123-86-4 n-butyl acetate 200 ppm 141-78-6 ethyl acetate 1,700 ppm 9002-88-4 Polyethylene low density 170 mg/m³ 64-17-5 ethanol 3300* ppm · PAC-3:

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110-19-0	isobutyl acetate	7500** ppm
108-65-6	2-methoxy-1-methylethyl acetate	5000* ppm
123-86-4	n-butyl acetate	3000* ppm
141-78-6	ethyl acetate	10000** ppm
	Polyethylene low density	1,000 mg/m ³
64-17-5	ethanol	15000* ppm

7 Handling and storage

· Handling:

• Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care. Prevent formation of aerosols.

Protect against electrostatic charges. Keep respiratory protective device available. Use explosion-proof apparatus / fittings and spark-proof tools.

• Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.

· Conditions for safe storage, including any incompatibilities

- · Storage:
 - Requirements to be met by storerooms and receptacles:
 - Store in a cool, well-ventilated area, away from heat and sources of ignition Provide solvent resistant, sealed floor.

Observe the label precautions, the expiration date for the use, if not indicated, is from delivery date of goods.

In cases where there is no reported expiration date , it means that the product must be used within 8 months.

- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.

• **Specific end use(s)** Those typical of the product and the instructions in the data sheet if required.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

· Coi	mponents with limit values that require monitoring at the workplace:	
1330-2	20-7 xylene	
PEL	Long-term value: 435 mg/m ³ , 100 ppm	
REL	Short-term value: 655 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm	
TLV	Short-term value: (150) ppm Long-term value: (100) NIC-20 ppm BEI, A4	
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100-4 ⁻	(Contd. of p
PEL	Long-term value: 435 mg/m ³ , 100 ppm
REL	Short-term value: 545 mg/m ³ , 125 ppm
	Long-term value: 435 mg/m ³ , 100 ppm
TLV	Long-term value: 20 NIC-20 ppm
	BEI, A3, NIC: OTO, BEI, A3
110-1	9-0 isobutyl acetate
PEL	Long-term value: 700 mg/m³, 150 ppm
REL	Long-term value: 700 mg/m³, 150 ppm
TLV	Short-term value: 150 ppm
	Long-term value: 50 ppm
	5-6 2-methoxy-1-methylethyl acetate
	Long-term value: 50 ppm
	6-4 n-butyl acetate
PEL	Long-term value: 710 mg/m³, 150 ppm
REL	Short-term value: 950 mg/m ³ , 200 ppm
	Long-term value: 710 mg/m³, 150 ppm
TLV	Short-term value: 150 ppm
4 4 4 7	Long-term value: 50 ppm
	B-6 ethyl acetate
PEL	Long-term value: 1400 mg/m ³ , 400 ppm
REL	Long-term value: 1400 mg/m ³ , 400 ppm
TLV	Long-term value: 400 ppm
-	5 ethanol
PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1000 ppm A3
	· Ingredients with biological limit values:
1330-2	20-7 xylene
	.5 g/g creatinine
	ledium: urine
	ime: end of shift
	Parameter: Methylhippuric acids
	1-4 ethylbenzene
	.15 g/g creatinine
	ledium: urine ïme: end of shift at end of workweek
	Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific)
	Additional information: The lists that were valid during the creation were used as basis.
	sure controls
-	sonal protective equipment:
	General protective and hygienic measures:
	Keep away from foodstuffs, beverages and feed.
	Immediately remove all soiled and contaminated clothing.
	Wash hands before breaks and at the end of work. Store protective clothing separately.
	Avoid contact with the eyes and skin.
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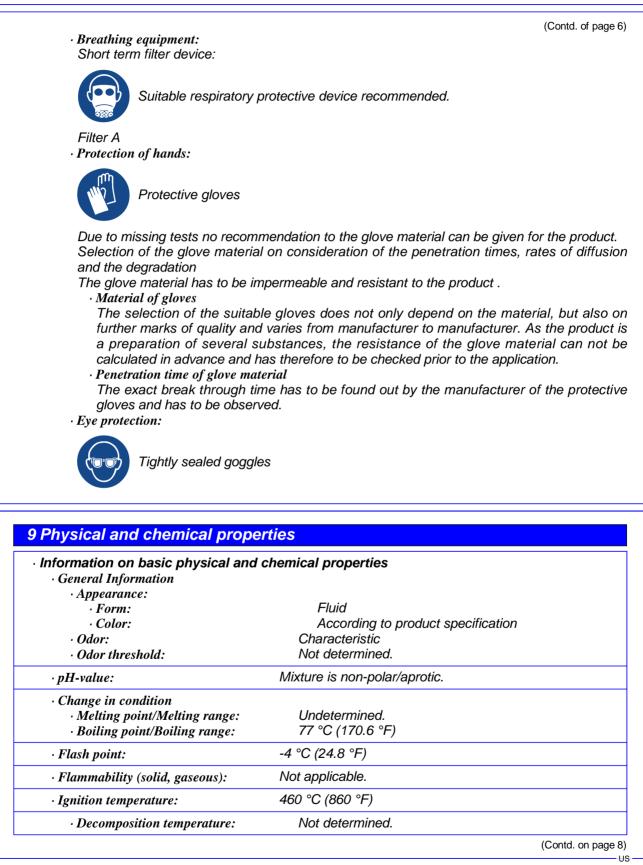
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			(Contd. of page
• Auto igni	ting:	Product is not selfigniting.	
· Danger oj	f explosion:	Product is not explosive. However, formation air/vapor mixtures are possible.	on of explosiv
· Explosion	limits:		
Lower		1 Vol %	
· Upper	:	11.5 Vol %	
· Vapor pre	essure at 20 °C (68 °F):	97 hPa (72.8 mm Hg)	
· Density (-	+/- 0,03) at 20 °C (68 °F):	0.986 g/cm³ (8.228 lbs/gal)	
· Relati	ve density	Not determined.	
· Vapor	density	Not determined.	
· Evapo	ration rate	Not determined.	
· Solubility	in / Miscibility with		
· Water	:	Not miscible or difficult to mix.	
· Partition	coefficient (n-octanol/water	·): Not determined.	
· Viscosity:			
· Dynan		Not determined.	
	natic at 20 °C (68 °F):	55 s (ISO 6 mm)	
· Oxidising	properties:	N.A.	
· Solvent co	ontent:		
· Water	:	0.0 %	
· VOC a	content:	54.21 %	
		534.5 g/l / 4.46 lb/gal	
· Solids	content:	45.8 %	
	mation (HAPS)		
1330-20-7 >	kylene		30-39.99%
100-41-4	ethylbenzene		5-9.99%
· Other inf	ormation	No further relevant information available.	

10 Stability and reactivity

- · Reactivity typical of the product as indicated in the data sheet
- **Chemical stability** The product is stable in normal conditions of storage and use recommended • Thermal decomposition / conditions to be avoided:
 - No decomposition if used and stored according to specifications.
- Possibility of hazardous reactions
 Reacts with oxidizing agents.
 Vapours may form explosive mixtures with air
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Acids, alkalis and oxidizing agents
- · Hazardous decomposition products:

in case of possible formation of combustion: Carbon monoxide and carbon dioxide

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· Acute to		cological effects	
	-	s that are relevant for classification:	
ATE (Acu	te Toxicit	y Estimate)	
Dermal	LD50	3,000 mg/kg (rabbit)	
Inhalative	LC50/4 h	26.1 mg/l (mouse)	
1330-20-7	xylene		
Oral	LD50.	3,523 mg/kg (mouse)	
Dermal	LD50	1,100 mg/kg (rabbit) (ATE value)	
	LD50.	12,126 mg/kg (rabbit)	
Inhalative	LC50/4 h	11 mg/l (mouse) (ATE value)	
		27.571 mg/l (mouse)	
100-41-4	ethylbenz		
Oral	LD50	3,500 mg/kg (mouse)	
Dermal	LD50	15,486 mg/kg (rabbit)	
Inhalative	LC50/4 h	17.2 mg/l (mouse)	
110-19-0	isobutyl a	cetate	
Oral	LD50	13,400 mg/kg (mouse)	
Dermal	LD50	17,401 mg/kg (rabbit)	
Inhalative	LC50/4 h	31 mg/l (mouse)	
108-65-6	2-methoxy	r-1-methylethyl acetate	
Oral	LD50	8,532 mg/kg (mouse)	
Dermal	LD50	5,001 mg/kg (rabbit)	
Inhalative	LC50/4 h	35.7 mg/l (mouse)	
123-86-4	n-butyl ac	etate	
Oral	LD50	10,760 mg/kg (mouse)	
Dermal	LD50	14,000 mg/kg (rabbit)	
Inhalative	LC50/4 h	21.1 mg/l (mouse)	
141-78-6	ethyl aceta	ate	
Oral	LD50	4,934 mg/kg (rabbit)	
Dermal	LD50	20,001 mg/kg (rabbit)	
Inhalative	LC50/4 h	1,600 mg/l (mouse)	
	LC0	22.6 ppm (mouse)	
64-17-5 et	thanol		
Oral	LD50	10,470 mg/kg (mouse)	
Dermal	LD50	20,000 mg/kg (rabbit)	
Inhalative	LC50/4 h	124.7 mg/l (mouse)	
	nary irritan		
		Irritant to skin and mucous membranes. Irritating effect.	

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• Additional toxicological information:	(Contd. of page 9)
Irritant	
Causes skin irritation.	
Causes serious eye irritation.	
Suspected of causing cancer.	
May cause respiratory irritation.	anta da suma como Devita af
May cause damage to the hearing organs through prolonged or rep exposure: Oral, Inhalation.	eated exposure. Route of
· Carcinogenic categories	
Ethylbenzene	
From IARC MONOGRAPHS VOLUME 77/2000 Human carcinogenicity data	
Two studies of workers potentially exposed to ethylbenzene in	a production plant and a
styrene polymerization plant were available. In the first study, no e	
was found but the description of methods was insufficient to allow	v proper evaluation of this
finding. In the second study, no cancer mortality excess was observed	erved during the follow-up
of 15 years.	
Evaluation	
There is inadequate evidence in humans for the carcinogenicity	of ethylbenzene.There is
sufficient evidence in experimental animals for the carcinogenicity of	ofethylbenzene.
· IARC (International Agency for Research on Cancer - Cl. 1 and 2)	
100-41-4 ethylbenzene	2B
64-17-5 ethanol	1 in alcoholic beverages
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
• OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

12 Ecological information

· Toxicity Harmful to aquatic life with long lasting effects.

• Aquatic t	oxicity:
1330-20-7 x	(ylene
EC50	2.2 mg/l (algae)
LC50 48h	1 mg/l (daphnia)
LC50 (96h)	2.6 mg/l (Fish)
100-41-4 et	hylbenzene
EC50	438 mg/l (algae) (72h)
	1.8 mg/l (daphnia) (48 h)
LC50 (96h)	12.1 mg/l (Fish)
110-19-0 is	obutyl acetate
EC50	370 mg/l (algae) (72 h)
	25 mg/l (daphnia)
LC50 (96h)	17 mg/l (Fish)
108-65-6 2-	methoxy-1-methylethyl acetate
EC50	1,001 mg/l (algae) (72 h)
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1		(Contd. of page 10)			
	501 mg/l (daphnia) (48 h)				
	134 mg/l (Fish)				
	butyl acetate				
EC50	397 mg/l (algae) (72 h)				
	44 mg/l (daphnia) (48 h)				
LC50 (96h)	18 mg/l (Fish)				
	hyl acetate				
EC50	165 mg/l (daphnia) (48 h)				
LC50 (96h)	230 mg/l (Fish)				
64-17-5 eth					
EC50	5,012 mg/l (daphnia) (48 h)				
LC50 (96h)	15.3 mg/l (Fish)				
· Persistence	e and degradability No further re	elevant information available.			
· Substanc	es Easily biodegradable				
1330-20-7	xylene				
100-41-4	ethylbenzene				
110-19-0	isobutyl acetate				
108-65-6	2-methoxy-1-methylethyl acetate				
123-86-4	n-butyl acetate				
141-78-6	ethyl acetate				
64-17-5	ethanol				
· Mobility : · Ecotoxical · Remark: · Additional · General :	Harmful to fish ecological information: notes: azard class 2 (Self-assessment): I	tion available.			
Do not a Danger t Harmful	to drinking water if even small qua to aquatic organisms erse effects No further relevant in	intities leak into the ground.			

· Uncleaned packagings:

• Recommendation: Disposal must be made according to official regulations.

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UN-Number • DOT, IMDG, IATA	UN1263
· Note	Check viscosity and flash point at section 9
UN proper shipping name	
· DOT	Paint
· IMDG, IATA	PAINT
Transport hazard class(es)	
·DOT	
FLAMARE LOOD	
· Class	3 Flammable liquids
· Label	3 2 Floremonte linuida
· Class · Label	3 Flammable liquids
· IMDG, IATA	
· Class · Label	3 Flammable liquids 3
	3
Packing group • DOT, IMDG, IATA	<i>III</i>
Environmental hazards: • Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids
 Hazard identification number (Kemler EMS Number: 	code): - F-E,S-E
• EMS Number: • Stowage Category	Г-Е, <u>З-Е</u> А
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.
Transport/Additional information:	
·DOT	
· Remarks:	> 450 I: 3 F1, II
· IMDG	
\cdot Limited quantities (LQ)	5L
\cdot Excepted quantities (EQ)	Code: E1 Maximum pot quantity por inpor packaging:
	Maximum net quantity per inner packaging: ml
	Maximum net quantity per outer packagi
	1000 ml
· Remarks:	> 450 l: 3, 11



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· IATA · Remarks:

> 30 I: 3, II

· UN "Model Regulation":

UN 1263 PAINT, 3, III

15 Regulatory information

mixture	ealth and environmental regulations/legislation specific for the nts of Federal Register	su	ıbsta	ance oi
· · Various · SAR	regulations A			
· S	ection 355 (extremely hazardous substances):			
None of the	e ingredients is listed.			
· S	ection 313 (Specific toxic chemical listings) :			
1330-20-7	xylene		30-3	39.99%
100-41-4	ethylbenzene		5-9.	99%
67-63-0	propan-2-ol		<0.0	01%
· TSC	A (Toxic Substances Control Act):			
All compor	ents have the value ACTIVE.			
· H	lazardous Air Pollutants			
1330-20-7	xylene			
100-41-4	ethylbenzene			
· Prop	osition 65			
· C	hemicals known to cause cancer:			
100-41-4	ethylbenzene		* 5	-9.99%
· C	hemicals known to cause reproductive toxicity for females:			
70657-70-4	2-methoxypropyl acetate		<	:0.01%
· C	hemicals known to cause reproductive toxicity for males:			
None of the	e ingredients is listed.			
· C	hemicals known to cause developmental toxicity:			
None of the	e ingredients is listed.			
· Carc	inogenic categories			
$\cdot E$	PA (Environmental Protection Agency)			
1330-20-7	-	1	30-3	39.99%
	ethylbenzene	D	5-9.99%	
78-93-3	butanone	1	<0.01%	
· 7	LV (Threshold Limit Value)			
1330-20-7	-			A4
	ethylbenzene			A3
64-17-5	64-17-5 ethanol			A3
67-63-0	67-63-0 propan-2-ol			A4

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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· National regulations:

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: IVM Chemicals Srl

· Contact: See emergency phone

· Date of preparation / last revision 09/07/2022 / 116

· Abbreviations and acronvms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit Flammable Liquids 2: Flammable liquids - Category 2 Flammable Liquids 3: Flammable liquids - Category 3 Acute Toxicity - Dermal 4: Acute toxicity - Category 4 Skin Irrititation 2: Skin corrosion/irritation - Category 2 Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A Carcinogenicity 2: Carcinogenicity – Category 2 Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3 Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) - Category 2 Aspiration Hazard 1: Aspiration hazard - Category 1 Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard - Category 3 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3 · Sources REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL and following amendments

Agency ECHA web site INRS Fiche Toxicologique IARC International agency for research on cancer • * Data compared to the previous version altered.