ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/30/2021 Version number 303 Reviewed on 08/30/2021

1 Identification

· **Product identifier**
· **Product number** KGA1
· **Trade name: PU CLEAR CONV 20SH**
· **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**

Flam. Liq. 2	H225 Highly flammable liquid and vapor.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2A	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
Carc. 1A	H350 May cause cancer.
Repr. 2	H361 Suspected of damaging fertility or the unborn child.
STOT SE 3	H336 May cause drowsiness or dizziness.
STOT RE 2	H373 May cause damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

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

GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
xylene
isobutyl acetate
ethylbenzene
ethyl acetate
Fatty acids, tallow, oleylamine compounds
· **Hazard statements**
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
H336 May cause drowsiness or dizziness.

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

· **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**

Health = 2
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *2
Fire = 3
Reactivity = 0

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**		
110-19-0	isobutyl acetate Flam. Liq. 2, H225 STOT SE 3, H336	20-24.99%
1330-20-7	xylene Flam. Liq. 3, H226 STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335 Aquatic Chronic 3, H412	15-19.99%
141-78-6	ethyl acetate Flam. Liq. 2, H225 Eye Irrit. 2A, H319; STOT SE 3, H336	5-9.99%
100-41-4	ethylbenzene Flam. Liq. 2, H225 Carc. 2, H351; STOT RE 2, H373; Asp. Tox. 1, H304 Acute Tox. 4, H332 Aquatic Chronic 3, H412	2.5-4.99%
123-86-4	n-butyl acetate Flam. Liq. 3, H226 STOT SE 3, H336	1-2.49%
78-93-3	butanone Flam. Liq. 2, H225 Eye Irrit. 2A, H319; STOT SE 3, H336	0.5-1%

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108-88-3	toluene Flam. Liq. 2, H225 Repr. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H336 Aquatic Chronic 3, H412	0.5-1%
64-17-5	ethanol Flam. Liq. 2, H225 Carc. 1A, H350 Eye Irrit. 2A, H319	0.5-1%
108-10-1	4-methylpentan-2-one Flam. Liq. 2, H225 Carc. 2, H351 Acute Tox. 4, H332; Eye Irrit. 2A, H319; STOT SE 3, H335	≥0.1-<0.5%
108-94-1	cyclohexanone Flam. Liq. 3, H226 Eye Dam. 1, H318 Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	<0.5%
67-63-0	propan-2-ol Flam. Liq. 2, H225 Eye Irrit. 2A, H319; STOT SE 3, H336	<0.5%
	Fatty acids, tallow, oleylamine compounds Acute Tox. 3, H301 STOT RE 2, H373 Skin Irrit. 2, H315; Skin Sens. 1A, H317 Aquatic Acute 3, H402; Aquatic Chronic 3, H412	≥0.1-<0.5%

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:**
Supply fresh air and to be sure call for a doctor.
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**
Allergic reactions
For symptoms and effects caused by substances, refer to Section 11.

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· **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.
· **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.
· **Protective equipment:**
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 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:**		
110-19-0	isobutyl acetate	450 ppm
1330-20-7	xylene	130 ppm
7631-86-9	silicon dioxide, chemically prepared	18 mg/mį
141-78-6	ethyl acetate	1,200 ppm
100-41-4	ethylbenzene	33 ppm
123-86-4	n-butyl acetate	5 ppm
78-93-3	butanone	200 ppm
108-88-3	toluene	67 ppm
64-17-5	ethanol	1,800 ppm

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9002-88-4	Polyethylene low density	16 mg/mį
108-10-1	4-methylpentan-2-one	75 ppm
108-94-1	cyclohexanone	60 ppm
67-63-0	propan-2-ol	400 ppm

· **PAC-2:**

110-19-0	isobutyl acetate	1300* ppm
1330-20-7	xylene	920* ppm
7631-86-9	silicon dioxide, chemically prepared	740 mg/mį
141-78-6	ethyl acetate	1,700 ppm
100-41-4	ethylbenzene	1100* ppm
123-86-4	n-butyl acetate	200 ppm
78-93-3	butanone	2700* ppm
108-88-3	toluene	560 ppm
64-17-5	ethanol	3300* ppm
9002-88-4	Polyethylene low density	170 mg/mį
108-10-1	4-methylpentan-2-one	500 ppm
108-94-1	cyclohexanone	830 ppm
67-63-0	propan-2-ol	2000* ppm

· **PAC-3:**

110-19-0	isobutyl acetate	7500** ppm
1330-20-7	xylene	2500* ppm
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/mį
141-78-6	ethyl acetate	10000** ppm
100-41-4	ethylbenzene	1800* ppm
123-86-4	n-butyl acetate	3000* ppm
78-93-3	butanone	4000* ppm
108-88-3	toluene	3700* ppm
64-17-5	ethanol	15000* ppm
9002-88-4	Polyethylene low density	1,000 mg/mį
108-10-1	4-methylpentan-2-one	3000* ppm
108-94-1	cyclohexanone	5000* ppm
67-63-0	propan-2-ol	12000** 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.

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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**
· **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

110-19-0 isobutyl acetate	
PEL	Long-term value: 700 mg/mį, 150 ppm
REL	Long-term value: 700 mg/mį, 150 ppm
TLV	Short-term value: 150 ppm Long-term value: 50 ppm
1330-20-7 xylene	
PEL	Long-term value: 435 mg/mį, 100 ppm
REL	Short-term value: 655 mg/mį, 150 ppm Long-term value: 435 mg/mį, 100 ppm
TLV	Short-term value: (150) ppm Long-term value: (100) NIC-20 ppm BEI, A4
141-78-6 ethyl acetate	
PEL	Long-term value: 1400 mg/mį, 400 ppm
REL	Long-term value: 1400 mg/mį, 400 ppm
TLV	Long-term value: 400 ppm
100-41-4 ethylbenzene	
PEL	Long-term value: 435 mg/mį, 100 ppm
REL	Short-term value: 545 mg/mį, 125 ppm Long-term value: 435 mg/mį, 100 ppm
TLV	Long-term value: 20 NIC-20 ppm BEI, A3, NIC: OTO, BEI, A3

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123-86-4 n-butyl acetate	
PEL	*Long-term value: 710 mg/mį, 150 ppm*
REL	*Short-term value: 950 mg/mį, 200 ppm* *Long-term value: 710 mg/mį, 150 ppm*
TLV	*Short-term value: 150 ppm* *Long-term value: 50 ppm*
78-93-3 butanone	
PEL	*Long-term value: 590 mg/mį, 200 ppm*
REL	*Short-term value: 885 mg/mį, 300 ppm* *Long-term value: 590 mg/mį, 200 ppm*
TLV	*Short-term value: 300 ppm* *Long-term value: 200 ppm* *BEI*
108-88-3 toluene	
PEL	*Long-term value: 200 ppm* *Ceiling limit value: 300; 500* ppm* **10-min peak per 8-hr shift*
REL	*Short-term value: 560 mg/mį, 150 ppm* *Long-term value: 375 mg/mį, 100 ppm*
TLV	*Long-term value: 20 ppm* *BEI, OTO, A4*
64-17-5 ethanol	
PEL	*Long-term value: 1900 mg/mį, 1000 ppm*
REL	*Long-term value: 1900 mg/mį, 1000 ppm*
TLV	*Short-term value: 1000 ppm* *A3*
108-10-1 4-methylpentan-2-one	
PEL	*Long-term value: 410 mg/mį, 100 ppm*
REL	*Short-term value: 300 mg/mį, 75 ppm* *Long-term value: 205 mg/mį, 50 ppm*
TLV	*Short-term value: 75 ppm* *Long-term value: 20 ppm* *BEI, A3*
108-94-1 cyclohexanone	
PEL	*Long-term value: 200 mg/mį, 50 ppm*
REL	*Long-term value: 100 mg/mį, 25 ppm* *Skin*
TLV	*Short-term value: 50 ppm* *Long-term value: 20 ppm* *Skin, BEI, A3*
67-63-0 propan-2-ol	
PEL	*Long-term value: 980 mg/mį, 400 ppm*
REL	*Short-term value: 1225 mg/mį, 500 ppm* *Long-term value: 980 mg/mį, 400 ppm*
TLV	*Short-term value: 400 ppm* *Long-term value: 200 ppm* *BEI, A4*

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· ***Ingredients with biological limit values:***

1330-20-7 xylene	
BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
100-41-4 ethylbenzene	
BEI	0.15 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific)
78-93-3 butanone	
BEI	2 mg/L Medium: urine Time: end of shift Parameter: Methyl ethyl ketone (nonspecific)
108-88-3 toluene	
BEI	0.02 mg/L Medium: blood Time: prior to last shift of workweek Parameter: Toluene 0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene 0.3 mg/g creatinine Medium: urine Time: end of shift Parameter: o-Cresol with hydrolysis (background)
108-10-1 4-methylpentan-2-one	
BEI	1 mg/L Medium: urine Time: end of shift Parameter: MIBK
108-94-1 cyclohexanone	
BEI	80 mg/L Medium: urine Time: end of shift at end of workweek Parameter: 1.2-Cyclohexanediol (with hydrolysis, nonspecific, nonquantitative) 8 mg/L Medium: urine Time: end of shift Parameter: Cyclohexanol (with hydrolysis, nonspecific, nonquantitative)
67-63-0 propan-2-ol	
BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)

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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal 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.
Pregnant women should strictly avoid inhalation or skin contact.
· **Breathing equipment:**
Short term filter device:

Suitable respiratory protective device recommended.

Filter A
· **Protection of hands:**

Protective gloves

Due to missing tests no recommendation to the glove material can be given for the product.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
The glove material has to be impermeable and resistant to the product .
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**

Tightly sealed goggles

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

· **Form:**	Fluid
· **Color:**	According to product specification
· **Odor:**	Characteristic
· **Odor threshold:**	Not determined.
· **pH-value:**	Mixture is non-polar/aprotic.

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· **Change in condition**	
· **Melting point/Melting range:**	Undetermined.
· **Boiling point/Boiling range:**	77 °C (170.6 °F)
· **Flash point:**	-4 °C (24.8 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	>300 °C (>572 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
· **Lower:**	1 Vol %
· **Upper:**	11.5 Vol %
· **Vapor pressure at 20 °C (68 °F):**	97 hPa (72.8 mm Hg)
· **Density (+/- 0,03) at 20 °C (68 °F):**	1.006 g/cmį (8.395 lbs/gal)
· **Relative density**	Not determined.
· **Vapor density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
· **Water:**	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
· **Dynamic:**	Not determined.
· **Kinematic at 20 °C (68 °F):**	55 s (ISO 6 mm)
· **Oxidising properties:**	N.A.
· **Solvent content:**	
· **Water:**	0.0 %
· **VOC content:**	52.60 % 529.2 g/l / 4.42 lb/gal
· **Solids content:**	47.4 %

· **Other information (HAPS)**

1330-20-7	xylene	15-19.99%
100-41-4	ethylbenzene	2.5-4.99%
108-88-3	toluene	0.5-1%
108-10-1	4-methylpentan-2-one	≥0.1-<0.5%

· **Other information** 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 according to specifications.

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· **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

11 Toxicological information

· **Information on toxicological effects** Suspected of damaging fertility or the unborn child.
· **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Oral	LD50	86,480 mg/kg
Dermal	LD50	6,655 mg/kg (rabbit)
Inhalative	LC50/4 h	57.9 mg/l (mouse)

110-19-0 isobutyl acetate		
Oral	LD50	13,400 mg/kg (mouse)
Dermal	LD50	17,401 mg/kg (rabbit)
Inhalative	LC50/4 h	31 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)
	LC50/4h.	27.571 mg/l (mouse)
141-78-6 ethyl acetate		
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)
100-41-4 ethylbenzene		
Oral	LD50	3,500 mg/kg (mouse)
Dermal	LD50	15,486 mg/kg (rabbit)
Inhalative	LC50/4 h	17.2 mg/l (mouse)
123-86-4 n-butyl acetate		
Oral	LD50	10,760 mg/kg (mouse)
Dermal	LD50	14,000 mg/kg (rabbit)
Inhalative	LC50/4 h	21.1 mg/l (mouse)
78-93-3 butanone		
Oral	LD50	2,001 mg/kg (mouse)
Dermal	LD50	5,001 mg/kg (rabbit)
Inhalative	LC50/4 h	21 mg/l (mouse)

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108-88-3 toluene		
Oral	LD50	5,000 mg/kg (mouse)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	25.7 mg/l (mouse)
64-17-5 ethanol		
Oral	LD50	10,470 mg/kg (mouse)
Dermal	LD50	20,000 mg/kg (rabbit)
Inhalative	LC50/4 h	124.7 mg/l (mouse)
108-10-1 4-methylpentan-2-one		
Oral	LD50	2,080 mg/kg (mouse)
Dermal	LD50	16,000 mg/kg (rab)
Inhalative	LC50/4 h	16.6 mg/l (mouse)
108-94-1 cyclohexanone		
Oral	LD50	1,890 mg/kg (mouse)
Dermal	LD50	1,100 mg/kg (rabbit)
Inhalative	LC50/4 h	6.3 mg/l (mouse)
67-63-0 propan-2-ol		
Oral	LD50	4,710 mg/kg (mouse)
Dermal	LD50	12,800 mg/kg (rabbit)
Inhalative	LC50/4 h	72.6 mg/l (mouse)
64742-95-6 Solvent naphtha (petroleum), light arom.		
Oral	LD50	6,801 mg/kg (mouse)
Dermal	LD50	3,401 mg/kg (rab)
Inhalative	LC50/4 h	20.1 mg/l (mouse)

· **Primary irritant effect:**
· **on the skin:**
Irritant to skin and mucous membranes.
Causes skin irritation.
· **on the eye:** Irritating effect.
· **Sensitization:** Sensitization possible through skin contact.
· **Additional toxicological information:**
Irritant
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.
May cause damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

· **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 excess of cancer incidence was found but the description of methods was insufficient to allow proper evaluation of this finding. In the second study, no cancer mortality excess was observed during the follow-up of 15 years.

Evaluation
There is inadequate evidence in humans for the carcinogenicity of ethylbenzene.There is

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sufficient evidence in experimental animals for the carcinogenicity ofethylbenzene.

· IARC (International Agency for Research on Cancer - Cl. 1 and 2)		
100-41-4	ethylbenzene	2B
64-17-5	ethanol	1
108-10-1	4-methylpentan-2-one	2B

· 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**

· Aquatic toxicity:	
110-19-0 isobutyl acetate	
EC50	370 mg/l (algae) (72 h)
	25 mg/l (daphnia)
LC50 (96h)	17 mg/l (Fish)
1330-20-7 xylene	
EC50	2.2 mg/l (algae) (72h)
LC50 48h	1 mg/l (daphnia)
LC50 (96h)	2.6 mg/l (Fish)
141-78-6 ethyl acetate	
EC50	165 mg/l (daphnia) (48 h)
LC50 (96h)	230 mg/l (Fish)
100-41-4 ethylbenzene	
EC50	438 mg/l (algae) (72h)
	1.8 mg/l (daphnia) (48 h)
LC50 (96h)	12.1 mg/l (Fish)
123-86-4 n-butyl acetate	
EC50	397 mg/l (algae) (72 h)
	44 mg/l (daphnia) (48 h)
LC50 (96h)	18 mg/l (Fish)
78-93-3 butanone	
EC50	2,029 mg/l (algae) (96 h)
	308 mg/l (daphnia) (48 h)
LC50 (96h)	2,993 mg/l (Fish)
108-88-3 toluene	
EC50	134 mg/l (algae) (96 h)
	3.78 mg/l (daphnia) (48 h)
LC50 (96h)	5.5 mg/l (Fish)
64-17-5 ethanol	
EC50	5,012 mg/l (daphnia) (48 h)
LC50 (96h)	15.3 mg/l (Fish)

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108-10-1 4-methylpentan-2-one	
EC50	201 mg/l (daphnia) (48 h)
LC50 (96h)	180 mg/l (Fish)
108-94-1 cyclohexanone	
EC50	101 mg/l (algae) (72 h)
	101 mg/l (daphnia)
LC50 (96h)	527 mg/l (Fish)
67-63-0 propan-2-ol	
EC50	1,001 mg/l (algae) (72 h)
	10,000 mg/l (daphnia) (24 h)
LC50 (96h)	9,640 mg/l (Fish)

· **Persistence and degradability** Easily biodegradable

· **Substances Easily biodegradable**		
110-19-0	isobutyl acetate	.
1330-20-7	xylene	.
141-78-6	ethyl acetate	.
100-41-4	ethylbenzene	.
123-86-4	n-butyl acetate	.
78-93-3	butanone	.
108-88-3	toluene	.
64-17-5	ethanol	.

· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.
Dispose of contents and container in accordance with local state and federal regulations.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**
· **DOT, IMDG, IATA** UN1263

(Contd. on page 15)

Product number KGA1
Trade name: PU CLEAR CONV 20SH

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· **Note**	Check the viscosity at section 9
· **UN proper shipping name**	
· **DOT**	Paint
· **IMDG, IATA**	PAINT
· **Transport hazard class(es)**	
· **DOT**	
	
· **Class**	3 Flammable liquids
· **Label**	3
· **Class**	3 Flammable liquids
· **Label**	3
· **IMDG, IATA**	
	
· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, IMDG, IATA**	III
· **Environmental hazards:**	
· **Marine pollutant:**	No
· **Special precautions for user**	Warning: Flammable liquids
· **Hazard identification number (Kemler code):**	-
· **EMS Number:**	F-E,S-E
· **Stowage Category**	A
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 1263 PAINT, 3, III

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
Requirements of Federal Register
.

(Contd. on page 16)

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· **Various regulations**
· **SARA**

· Section 355 (extremely hazardous substances):
None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings) :		
1330-20-7	xylene	15-19.99%
100-41-4	ethylbenzene	2.5-4.99%
108-88-3	toluene	0.5-1%
108-10-1	4-methylpentan-2-one	≥0.1-<0.5%
67-63-0	propan-2-ol	<0.5%

· TSCA (Toxic Substances Control Act):
All components have the value ACTIVE.

· Hazardous Air Pollutants	
1330-20-7	xylene
100-41-4	ethylbenzene
108-88-3	toluene
108-10-1	4-methylpentan-2-one

· **Proposition 65**

· Chemicals known to cause cancer:			
100-41-4	ethylbenzene	*	2.5-4.99%
108-10-1	4-methylpentan-2-one	*	≥0.1-<0.5%

· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:		
108-88-3	toluene	0.5-1%
64-17-5	ethanol	0.5-1%
108-10-1	4-methylpentan-2-one	≥0.1-<0.5%

· **Carcinogenic categories**

· EPA (Environmental Protection Agency)			
1330-20-7	xylene	I	15-19.99%
100-41-4	ethylbenzene	D	2.5-4.99%
78-93-3	butanone	I	0.5-1%
108-88-3	toluene	II	0.5-1%
108-10-1	4-methylpentan-2-one	I	≥0.1-<0.5%

· TLV (Threshold Limit Value)		
1330-20-7	xylene	A4
100-41-4	ethylbenzene	A3
108-88-3	toluene	A4
64-17-5	ethanol	A3
108-94-1	cyclohexanone	A3
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.

· **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· **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** 08/30/2021 / 302
· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
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
Flam. Liq. 2: Flammable liquids ï Category 2
Flam. Liq. 3: Flammable liquids ï Category 3
Acute Tox. 3: Acute toxicity ï Category 3
Acute Tox. 4: Acute toxicity ï Category 4
Skin Irrit. 2: Skin corrosion/irritation ï Category 2
Eye Dam. 1: Serious eye damage/eye irritation ï Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation ï Category 2A
Skin Sens. 1: Skin sensitisation ï Category 1
Skin Sens. 1A: Skin sensitisation ï Category 1A
Carc. 1A: Carcinogenicity ï Category 1A
Carc. 2: Carcinogenicity ï Category 2
Repr. 2: Reproductive toxicity ï Category 2
STOT SE 3: Specific target organ toxicity (single exposure) ï Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) ï Category 2
Asp. Tox. 1: Aspiration hazard ï Category 1
Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard ï Category 3
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard ï 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

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IARC International agency for research on cancer

· *** Data compared to the previous version altered.**