Safety Data Sheet
acc. to OSHA HCS

Printing date 09/06/2022 Version number 586 Reviewed on 09/06/2022

1 Identification

· **Product identifier**

· **Product number** KKR1

· **Trade name: PU WHITE CONVERTER 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**

Flammable Liquids 2	H225 Highly flammable liquid and vapor.
Skin Irritation 2	H315 Causes skin irritation.
Eye Irritation 2A	H319 Causes serious eye irritation.
Carcinogenicity 2	H351 Suspected of causing cancer.
Toxic to Reproduction 2	H361 Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity - Repeated Exposure 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
ethylbenzene

· **Hazard statements**
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.

(Contd. on page 2)

ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/06/2022 Version number 586 Reviewed on 09/06/2022

Product number KKR1
Trade name: PU WHITE CONVERTER 20SH

(Contd. of page 1)

· **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:**

1330-20-7	xylene 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 Irritation 2, H315; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335 Aquatic Acute 3, H402; Aquatic Chronic 3, H412	12.5-15%
110-19-0	isobutyl acetate Flammable Liquids 2, H225 Specific Target Organ Toxicity - Single Exposure 3, H336	10-12.49%
141-78-6	ethyl acetate Flammable Liquids 2, H225 Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	2.5-4.99%
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	2.5-4.99%

(Contd. on page 3)

ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
acc. to OSHA HCS

Product number KKR1
Trade name: PU WHITE CONVERTER 20SH

(Contd. of page 2)

123-86-4	n-butyl acetate Flammable Liquids 3, H226 Specific Target Organ Toxicity - Single Exposure 3, H336	1-2.49%
78-93-3	butanone Flammable Liquids 2, H225 Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	<0.5%
64-17-5	ethanol Flammable Liquids 2, H225 Eye Irritation 2A, H319	<0.5%
108-88-3	toluene Flammable Liquids 2, H225 Toxic to Reproduction 2, H361; Specific Target Organ Toxicity - Repeated Exposure 2, H373; Aspiration Hazard 1, H304 Skin Irritation 2, H315; Specific Target Organ Toxicity - Single Exposure 3, H336 Aquatic Chronic 3, H412	≥0.1-<0.5%
108-10-1	4-methylpentan-2-one Flammable Liquids 2, H225 Carcinogenicity 2, H351 Acute Toxicity - Inhalation 4, H332; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H335	≥0.1-<0.5%
108-94-1	cyclohexanone Flammable Liquids 3, H226 Eye Damage 1, H318 Acute Toxicity - Oral 4, H302; Acute Toxicity - Dermal 4, H312; Acute Toxicity - Inhalation 4, H332; Skin Irritation 2, H315	<0.5%
108-65-6	2-methoxy-1-methylethyl acetate Flammable Liquids 3, H226 Specific Target Organ Toxicity - Single Exposure 3, H336	<0.5%
67-63-0	propan-2-ol Flammable Liquids 2, H225 Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	<0.5%
77-99-6	propylidynetrimethanol Toxic to Reproduction 2, H361	≥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:*** In case of unconsciousness place patient stably in side position for transportation.

(Contd. on page 4)

(Contd. of page 3)

· ***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.
· ***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.

(Contd. on page 5)

ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
acc. to OSHA HCS

Product number KKR1
Trade name: PU WHITE CONVERTER 20SH

(Contd. of page 4)

· **Protective Action Criteria for Chemicals**

· PAC-1:		
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	30 mg/m³
1330-20-7	xylene	130 ppm
110-19-0	isobutyl acetate	450 ppm
7631-86-9	silicon dioxide, chemically prepared	18 mg/m³
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
64-17-5	ethanol	1,800 ppm
108-88-3	toluene	67 ppm
9002-88-4	Polyethylene low density	16 mg/m³
108-10-1	4-methylpentan-2-one	75 ppm
108-94-1	cyclohexanone	60 ppm
108-65-6	2-methoxy-1-methylethyl acetate	50 ppm
67-63-0	propan-2-ol	400 ppm

· PAC-2:		
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	330 mg/m³
1330-20-7	xylene	920* ppm
110-19-0	isobutyl acetate	1300* ppm
7631-86-9	silicon dioxide, chemically prepared	740 mg/m³
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
64-17-5	ethanol	3300* ppm
108-88-3	toluene	560 ppm
9002-88-4	Polyethylene low density	170 mg/m³
108-10-1	4-methylpentan-2-one	500 ppm
108-94-1	cyclohexanone	830 ppm
108-65-6	2-methoxy-1-methylethyl acetate	1,000 ppm
67-63-0	propan-2-ol	2000* ppm

· PAC-3:		
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	2,000 mg/m³
1330-20-7	xylene	2500* ppm
110-19-0	isobutyl acetate	7500** ppm
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m³
141-78-6	ethyl acetate	10000** ppm
100-41-4	ethylbenzene	1800* ppm
123-86-4	n-butyl acetate	3000* ppm

(Contd. on page 6)

(Contd. of page 5)

78-93-3	butanone	4000* ppm
64-17-5	ethanol	15000* ppm
108-88-3	toluene	3700* ppm
9002-88-4	Polyethylene low density	1,000 mg/m³
108-10-1	4-methylpentan-2-one	3000* ppm
108-94-1	cyclohexanone	5000* ppm
108-65-6	2-methoxy-1-methylethyl acetate	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.
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.

(Contd. on page 7)

ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
acc. to OSHA HCS

Product number KKR1
Trade name: PU WHITE CONVERTER 20SH

(Contd. of page 6)

1330-20-7 xylene	
PEL	Long-term value: 435 mg/m³, 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
110-19-0 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
141-78-6 ethyl acetate	
PEL	Long-term value: 1400 mg/m³, 400 ppm
REL	Long-term value: 1400 mg/m³, 400 ppm
TLV	Long-term value: 400 ppm
100-41-4 ethylbenzene	
PEL	Long-term value: 435 mg/m³, 100 ppm
REL	Short-term value: 545 mg/m³, 125 ppm Long-term value: 435 mg/m³, 100 ppm
TLV	Long-term value: 20 NIC-20 ppm BEI, A3, NIC: OTO, BEI, A3
123-86-4 n-butyl acetate	
PEL	Long-term value: 710 mg/m³, 150 ppm
REL	Short-term value: 950 mg/m³, 200 ppm Long-term value: 710 mg/m³, 150 ppm
TLV	Short-term value: 150 ppm Long-term value: 50 ppm
78-93-3 butanone	
PEL	Long-term value: 590 mg/m³, 200 ppm
REL	Short-term value: 885 mg/m³, 300 ppm Long-term value: 590 mg/m³, 200 ppm
TLV	Short-term value: 300 ppm Long-term value: 200 ppm BEI
64-17-5 ethanol	
PEL	Long-term value: 1900 mg/m³, 1000 ppm
REL	Long-term value: 1900 mg/m³, 1000 ppm
TLV	Short-term value: 1000 ppm A3
108-88-3 toluene	
PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift

(Contd. on page 8)

ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
acc. to OSHA HCS

Product number KKR1
Trade name: PU WHITE CONVERTER 20SH

(Contd. of page 7)

REL	Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm
TLV	Long-term value: 20 ppm BEI, OTO, A4
108-10-1 4-methylpentan-2-one	
PEL	Long-term value: 410 mg/m³, 100 ppm
REL	Short-term value: 300 mg/m³, 75 ppm Long-term value: 205 mg/m³, 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/m³, 50 ppm
REL	Long-term value: 100 mg/m³, 25 ppm Skin
TLV	Short-term value: 50 ppm Long-term value: 20 ppm Skin, BEI, A3
108-65-6 2-methoxy-1-methylethyl acetate	
WEEL	Long-term value: 50 ppm
67-63-0 propan-2-ol	
PEL	Long-term value: 980 mg/m³, 400 ppm
REL	Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm
TLV	Short-term value: 400 ppm Long-term value: 200 ppm BEI, A4

· **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)

(Contd. on page 9)

(Contd. of page 8)

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)

· ***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.

(Contd. on page 10)

(Contd. of page 9)

· **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

*

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.
· **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.

(Contd. on page 11)

ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
acc. to OSHA HCS

Product number KKR1
Trade name: PU WHITE CONVERTER 20SH

(Contd. of page 10)

· **Ignition temperature:**	370 °C (698 °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):**	1.3 g/cm³ (10.849 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:**	34.71 % 451.2 g/l / 3.77 lb/gal
· **Solids content:**	65.3 %

· **Other information (HAPS)**

1330-20-7	xylene	12.5-15%
100-41-4	ethylbenzene	2.5-4.99%
108-88-3	toluene	≥0.1-<0.5%
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 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.

(Contd. on page 12)

(Contd. of page 11)

· **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**
· *Acute toxicity:*

· *LD/LC50 values that are relevant for classification:*

ATE (Acute Toxicity Estimate)		
Dermal	LD50	8,529 mg/kg (rabbit)
Inhalative	LC50/4 h	74.1 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)
	LC50/4h.	27.571 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)
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)

(Contd. on page 13)

ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
acc. to OSHA HCS

Product number KKR1
Trade name: PU WHITE CONVERTER 20SH

(Contd. of page 12)

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)
108-88-3 toluene		
Oral	LD50	5,000 mg/kg (mouse)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	25.7 mg/l (mouse)
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)
108-65-6 2-methoxy-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)
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)
77-99-6 propylidynetrimethanol		
Oral	LD50	14,700 mg/kg (mouse)
Dermal	LD50	10,001 mg/kg (mouse)

· ***Primary irritant effect:***
· ***on the skin:*** *Irritant to skin and mucous membranes.*
· ***on the eye:*** *Irritating effect.*
· ***Sensitization:*** *No sensitizing effects known.*
· ***Additional toxicological information:***
Irritant
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
May cause damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation.
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

· ***Carcinogenic categories***
Titanium dioxide
IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure

(Contd. on page 14)

(Contd. of page 13)

to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."
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 sufficient evidence in experimental animals for the carcinogenicity ofethylbenzene.

· IARC (International Agency for Research on Cancer - Cl. 1 and 2)		
13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	2B - DUST
100-41-4	ethylbenzene	2B
64-17-5	ethanol	1 in alcoholic beverages
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:	
1330-20-7 xylene	
EC50	2.2 mg/l (algae)
LC50 48h	1 mg/l (daphnia)
LC50 (96h)	2.6 mg/l (Fish)
110-19-0 isobutyl acetate	
EC50	370 mg/l (algae) (72 h)
	25 mg/l (daphnia)
LC50 (96h)	17 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)

(Contd. on page 15)

(Contd. of page 14)

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)
64-17-5 ethanol	
EC50	5,012 mg/l (daphnia) (48 h)
LC50 (96h)	15.3 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)
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)
108-65-6 2-methoxy-1-methylethyl acetate	
EC50	1,001 mg/l (algae) (72 h)
	501 mg/l (daphnia) (48 h)
LC50 (96h)	134 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)
77-99-6 propylidynetrimethanol	
EC50	1,001 mg/l (algae) (72h)
	13,000 mg/l (daphnia) (48h)
LC50 (96h)	1,001 mg/l (Fish)

· **Persistence and degradability** No further relevant information available.

· **Substances Easily biodegradable**		
1330-20-7	xylene	.
110-19-0	isobutyl acetate	.
141-78-6	ethyl acetate	.
100-41-4	ethylbenzene	.
123-86-4	n-butyl acetate	.

(Contd. on page 16)

(Contd. of page 15)

· **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
· Note	Check viscosity and flash point 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

(Contd. on page 17)

ivm Chemicals
coatings & polymers technologies

Safety Data Sheet
acc. to OSHA HCS

Product number KKR1
Trade name: PU WHITE CONVERTER 20SH

(Contd. of page 16)

· **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:**	
· **DOT**	
· **Remarks:**	> 450 l: 3 F1, II
· **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
· **Remarks:**	> 450 l: 3, II
· **IATA**	
· **Remarks:**	> 30 l: 3, II
· **UN "Model Regulation":**	UN 1263 PAINT, 3, III

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture** .
· **Various regulations**
· **SARA**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings) :**

1330-20-7	xylene	12.5-15%
100-41-4	ethylbenzene	2.5-4.99%
108-88-3	toluene	≥0.1-<0.5%

(Contd. on page 18)

Product number KKR1
Trade name: PU WHITE CONVERTER 20SH

(Contd. of page 17)

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:**
Titanium dioxide only in bound form

13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	only for Dust	25-29.99%
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	≥0.1-<0.5%
108-10-1	4-methylpentan-2-one	≥0.1-<0.5%

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

1330-20-7	xylene	I	12.5-15%
100-41-4	ethylbenzene	D	2.5-4.99%
78-93-3	butanone	I	<0.5%
108-88-3	toluene	II	≥0.1-<0.5%
108-10-1	4-methylpentan-2-one	I	≥0.1-<0.5%

· **TLV (Threshold Limit Value)**

13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	A4
1330-20-7	xylene	A4
100-41-4	ethylbenzene	A3
64-17-5	ethanol	A3
108-88-3	toluene	A4
108-94-1	cyclohexanone	A3
67-63-0	propan-2-ol	A4

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

13463-67-7	Titanium dioxide C.I. 77891 Pigment white 6	25-29.99%

(Contd. on page 19)

(Contd. of page 18)

· ***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*** 09/06/2022 / 585
· ***Abbreviations and acronyms:***
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 Irritation 2: Skin corrosion/irritation – Category 2
Eye Damage 1: Serious eye damage/eye irritation – Category 1
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
Carcinogenicity 2: Carcinogenicity – Category 2
Toxic to Reproduction 2: Reproductive toxicity – 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.***