



# Safety Data Sheet PU clear semi sheen top coat

## Safety Data Sheet dated 2/12/2018, version 4

Product identif	l (ier
IVIIXU	ire identification:
Trade	e name: PU clear semi sheen top coat
	r means of identification:
	e code: 6OPU91G60 d use of the chemical and restrictions on use
	mmended use:Surface coating
	rictions on use:
Com	s, and telephone number of the chemical manufacturer, importer, or other responsible party pany: I S.p.A.
Address:	o.p.c
	Roma, 85
	0 S.Dono di Massanzago (PD) - ITALY
Tel Distributed by:	+39 0499322311
	IINI INDUSTRIES, INC.
2300	Holloway Drive
	eno, OK 73036
USA Tel 1	1-800-262-5710
	1-600-262-9310
	.gemini-coatings.com
Competent pe	rson responsible for the safety data sheet:
safet	y@sirca.it
Emergency ph	
	lazardous Materials [or Dangerous Goods] Incident Leak, Fire, Exposure, or Accident
	CHEMTREC Day or Night
	0-424-9300 / +1 703-527-3887.
	NTIFICATION of the chemical Danger, Flam. Liq. 2, Highly flammable liquid and vapour.
Classification	of the chemical
Classification	of the chemical Danger, Flam. Liq. 2, Highly flammable liquid and vapour.
	of the chemical Danger, Flam. Liq. 2, Highly flammable liquid and vapour. Warning, Skin Irrit. 2, Causes skin irritation.
Classification (	of the chemical Danger, Flam. Liq. 2, Highly flammable liquid and vapour. Warning, Skin Irrit. 2, Causes skin irritation. Warning, Eye Irrit. 2A, Causes serious eye irritation.
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H317 May cause an allergic skin reaction. H351 Suspected of causing cancer.

- H361 Suspected of damaging fertility or the unborn child.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.
- Precautionary statements:
  - P201 Obtain special instructions before use.
  - P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

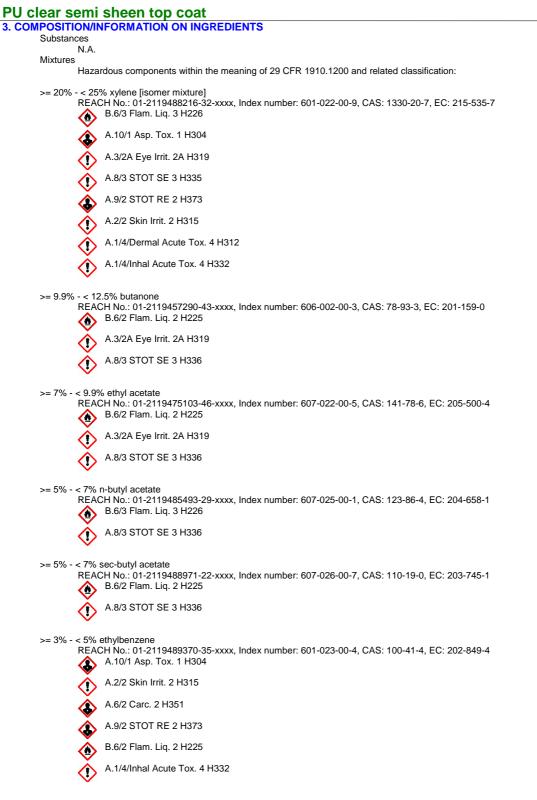
  - P240 Ground/bond container and receiving equipment.
  - P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  - P242 Use only non-sparking tools.
  - P243 Take precautionary measures against static discharge. P260 Do not breathe dust/fume/gas/mist/vapours/spray.

  - P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash your face, hands and every exposed part thoroughly after handling.
  - P271 Use only outdoors or in a well-ventilated area.
  - P272 Contaminated work clothing should not be allowed out of the workplace.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P302+P352 IF ON SKIN: Wash with plenty of water and soap.
  - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P308+P313 IF exposed or concerned: Get medical advice/attention.
  - P312 Call a POISON CENTER/doctor/... if you feel unwell.
  - P314 Get medical advice/attention if you feel unwell.
  - P332+P313 If skin irritation occurs: Get medical advice/attention.
  - P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.
  - P362+P364 Take off contaminated clothing and wash it before reuse.
  - P363 Wash contaminated clothing before reuse.
  - P370+P378 In case of fire: Use a CO2, Foam, Chemical powders for extinction.
  - P403+P233 Store in a well-ventilated place. Keep container tightly closed.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - P405 Store locked up
  - P501 Dispose of contents/container in accordance with applicable regulations.
- Special Provisions:
- None
- Hazards not otherwise classified identified during the classification process:
- None Ingredient(s) with unknown acute toxicity:
  - None.
- Additional classification information
  - NFPA rating:





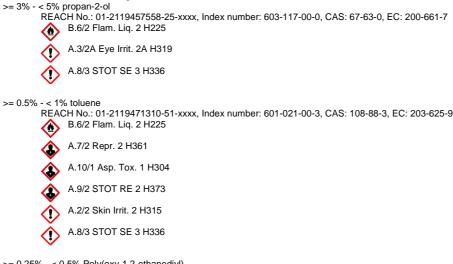




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>= 0.25% - < 0.5% Poly(oxy-1,2-ethanediyl), alpha-[3-[3-(2h-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-omega-hydroxy-]-

CAS: 104810-48-2 A.4.2/1A Skin Sens. 1A H317 US-HAE/A2 Aquatic Acute 2 H401 US-HAE/C2 Aquatic Chronic 2 H411

>= 0.1% - < 0.2% Poly(oxy-1,2-ethanediyl),

droxypheny CAS: 104810-47-1

A.4.2/1A Skin Sens. 1A H317 US-HAE/A2 Aquatic Acute 2 H401 US-HAE/C2 Aquatic Chronic 2 H411

#### 4. FIRST-AID MEASURES

Description of necessary measures

In case of skin contact:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediately and dispose off safely. After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
- Protect uninjured eye
- In case of Ingestion: Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

Most important symptoms/effects, acute and delayed None

Indication of immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Treatment: None

#### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: In case of fire: Use a CO2, Foam, Chemical powders for extinction. Unsuitable extinguishing media: None in particular. Specific hazards arising from the chemical

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Do not inhale explosion and combustion gases. Burning produces heavy smoke. Hazardous combustion products: None

Explosive properties: N.A. Oxidizing properties: ΝA Special protective equipment and precautions for fire-fighters Use suitable breathing apparatus Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment. Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation. Remove persons to safety.

Use appropriate respiratory protection. See protective measures under point 7 and 8.

Methods and materials for containment and cleaning up

Wash with plenty of water.

#### 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Do not use on extensive surface areas in premises where there are occupants.

Use localized vertilation system. Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities Always keep in a well ventilated place. Keep away from upuarded flame, sparks, and heat sources. Avoid direct exposure to sunlight. Keep away from flame and sparks. Avoid accumulating electrostatic charge. Place recipients on the ground whilst decanting, and wear anti-static clothing and shoes.

Keep away from food, drink and feed. Incompatible materials: None in particular. Instructions as regards storage premises: Cool and adequately ventilated. Safety electric system. Storage temperature: Store at ambient temperature.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters xylene [isomer mixture] - CAS: 1330-20-7 (OEL (IT)) - TWA(8h): 221 mg/m3, 50 ppm - STEL: 442 mg/m3, 100 ppm - Behaviour: Binding - Notes: pelle EU - TWA(8h): 221 mg/m3, 50 ppm - STEL: 442 mg/m3, 100 ppm - Notes: Skin ACGIH - TWA(8h): 100 ppm - STEL: 150 ppm - Notes: A4, BEI - URT and eye irr, CNS impair butanone - CAS: 78-93-3 (OEL (IT)) - TWA(8h): 600 mg/m3, 200 ppm - STEL: 900 mg/m3, 300 ppm - Behaviour: Binding EU - TWÁ(8h): 600 mg/m3, 200 ppm - STEL: 900 mg/m3, 300 ppm ACGIH - TWA(8h): 200 ppm - STEL: 300 ppm - Notes: BEI - URT irr, CNS and PNS impair ethyl acetate - CAS: 141-78-6 (OEL (IT)) - TWA: 400 ppm ACGIH - TWA(8h): 400 ppm - Notes: URT and eye irr n-butyl acetate - CAS: 123-86-4 TWA (Italia) - TWA: 150 ppm - STEL: 200 ppm ACGIH - TWA: 150 ppm - STEL: 200 ppm - Notes: Eye and URT irr sec-butyl acetate - CAS: 110-19-0 Québec - TWA: 712.64 mg/m3, 150 ppm ACGIH - TWA(8h): 50 ppm - STEL: 150 ppm - Notes: Eye and URT irr ethylbenzene - CAS: 100-41-4 (OEL (IT)) - TWA(8h): 442 mg/m3, 100 ppm - STEL: 884 mg/m3, 200 ppm - Behaviour: Binding - Notes: pelle

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EU - TWA(8h): 442 mg/m3, 100 ppm - STEL: 884 mg/m3, 200 ppm - Notes: Skin ACGIH - TWA(8h): 20 ppm - Notes: A3, BEI - URT irr, kidney dam (nephropathy), cochlear impair propan-2-ol - CAS: 67-63-0 ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair

toluene - CAS: 108-88-3 (OEL (IT)) - TWA(8h): 192 mg/m3, 50 ppm - Behaviour: Binding - Notes: Pelle

EU - TWA(8h): 192 mg/m3, 50 ppm - STEL: 384 mg/m3, 100 ppm - Notes: Skin ACGIH - TWA(8h): 20 ppm - Notes: A4, BEI - Visual impair, female repro, pregnancy loss

**DNEL Exposure Limit Values** 

xylene [isomer mixture] - CAS: 1330-20-7

Worker Industry: 180 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Industry: 77 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 108 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects Consumer: 1872 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects Consumer: 12.5 mg/Kg-bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects butanone - CAS: 78-93-3 Worker Industry: 1161 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Industry: 600 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 412 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects Consumer: 106 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 31 mg/Kg-bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects ethyl acetate - CAS: 141-78-6

Worker Industry: 1468 mg/m3 - Consumer: 734 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 1468 ppm - Exposure: Human Inhalation - Frequency: Short Term (acute) Worker Industry: 63 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Industry: 734 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects Worker Industry: 734 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 4.5 mg/Kg-bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects Consumer: 734 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term (acute) Consumer: 734 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 37 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, local effects Consumer: 367 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects Consumer: 367 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects n-butyl acetate - CAS: 123-86-4 Worker Professional: 600 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 300 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects Worker Professional: 11 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Professional: 11 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects Consumer: 300 mg/kg - Exposure: Human Inhalation - Frequency: Short Term, local effects Consumer: 35.7 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, local effects Consumer: 6 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects Consumer: 2 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects Consumer: 2 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects

sec-butyl acetate - CAS: 110-19-0

Worker Industry: 4.95 mg/Kg-bw/day - Consumer: 2.48 mg/Kg-bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 243 mg/m3 - Consumer: 60.3 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 2.48 mg/Kg-bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects ethylbenzene - CAS: 100-41-4

Worker Industry: 180 mg/kg/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Industry: 293 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects Worker Industry: 77 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects propan-2-ol - CAS: 67-63-0

Worker Industry: 500 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Worker Industry: 888 mg/kg/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects Consumer: 89 mg/kg - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 319 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects Consumer: 26 mg/kg/day - Exposure: Human Oral - Frequency: Long Term, systemic effects toluene - CAS: 108-88-3

Consumer: 226 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects Consumer: 226 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, local effects Consumer: 226 mg/m3 - Exposure: Human Dermal - Frequency: Long Term, systemic effects Consumer: 56.5 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 8.13 mg/Kg-bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects Worker Industry: 384 mg/kg/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects Worker Industry: 384 mg/m3 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects Worker Industry: 192 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects PNEC Exposure Limit Values

xylene [isomer mixture] - CAS: 1330-20-7

Target: Fresh Water - Value: 0.327 mg/l



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Target: Fresh Water - Value: 0.327 mg/l Target: occasional emission - Value: 0.327 mg/l Target: Microorganisms in sewage treatments - Value: 6.58 mg/l Target: Soil (agricultural) - Value: 2.31 mg/kg - Notes:: dry Target: Marine water sediments - Value: 12.46 mg/kg - Notes:: dry Target: Karne water sediments - Value: 12.46 mg/kg - Notes.: dry butanone - CAS: 78-93-3 Target: Marine water - Value: 55.8 mg/l Target: Fresh Water - Value: 55.8 mg/l Target: occasional emission - Value: 55.8 mg/l Target: STP - Value: 709 mg/l Target: Freshwater sediments - Value: 284.7 mg/kg dwt Target: Marine water sediments - Value: 284.7 mg/kg dwt Target: Soil (agricultural) - Value: 22.5 mg/kg Target: orally (secondary poisoning) - Value: 1000 mg/kg ethyl acetate - CAS: 141-78-6 Target: Fresh Water - Value: 0.26 mg/l Target: Marine water - Value: 0.026 mg/l Target: Freshwater sediments - Value: 1.25 mg/kg Target: Marine water sediments - Value: 0.125 mg/kg Target: Soil (agricultural) - Value: 0.24 mg/kg Target: orally (secondary poisoning) - Value: 200 mg/kg - Notes:: Dietetico Target: STP - Value: 650 mg/l n-butyl acetate - CAS: 123-86-4 Target: Fresh Water - Value: 0.18 mg/l Target: Marine water - Value: 0.018 mg/l Target: Freshwater sediments - Value: 0.981 mg/kg Target: Marine water sediments - Value: 0.0981 mg/kg Target: Soil (agricultural) - Value: 0.0903 mg/kg Target: STP - Value: 35.6 mg/l sec-butyl acetate - CAS: 110-19-0 Target: Fresh Water - Value: 0.17 mg/l Target: Marine water - Value: 0.017 mg/l Target: Freshwater sediments - Value: 0.877 mg/kg Target: Marine water sediments - Value: 0.0877 mg/kg Target: Soil (agricultural) - Value: 0.0755 mg/kg ethylbenzene - CAS: 100-41-4 Target: Fresh Water - Value: 0.1 mg/l Target: Marine water - Value: 0.01 mg/l Target: Marine water sediments - Value: 13.7 mg/l Target: Freshwater sediments - Value: 13.7 mg/l Target: occasional emission - Value: 0.1 mg/l propan-2-ol - CAS: 67-63-0 Target: Fresh Water - Value: 140.9 mg/l Target: Marine water - Value: 140.9 mg/l Target: occasional emission - Value: 140.9 mg/l Target: Freshwater sediments - Value: 552 mg/kg Target: Marine water sediments - Value: 552 mg/kg Target: Soil (agricultural) - Value: 28 mg/kg Target: STP - Value: 2251 mg/l toluene - CAS: 108-88-3 Target: Fresh Water - Value: 0.68 mg/l Target: Marine water - Value: 0.68 mg/l Target: Soil (agricultural) - Value: 2.89 mg/kg Target: Marine water sediments - Value: 16.39 mg/l Target: Freshwater sediments - Value: 16.39 mg/l Target: STP - Value: 13.61 mg/l Appropriate engineering controls: None Individual protection measures Eye protection: Use close fitting safety goggles, don't use eye lens. Protection for skin: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. Protection for hands: Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber. Respiratory protection: Use respiratory protection where ventilation is insufficient or exposure is prolonged. Use adequate protective respiratory equipment. Thermal Hazards: None



#### PU clear semi sheen top coat 9. PHYSICAL AND CHEMICAL PROPERTIE

IYSICAL AND CHEMICAL PROPERTIES				
	Appearance and colour:	liquid		
	Odour:	characteristic		
	Odour threshold:	N.A.		
	pH:	N.A.		
	Melting point / freezing point:	< 1° C		
	Initial boiling point and boiling range:	> 55° C		
	Solid/gas flammability:	N.A.		
	Upper/lower flammability or explosive limits:	N.A.		
	Vapour density:	N.A.		
	Flash point:	< 21°C - < 69.8 °F		
	Evaporation rate:	N.A.		
	Vapour pressure:	N.A.		
	Relative density:	0.9500 Kg/l a 20°C		
	Solubility in water:	N.A.		
	Solubility in oil:	N.A.		
	Partition coefficient (n-octanol/water):	N.A.		
	Auto-ignition temperature:	> 250° C		
	Decomposition temperature:	N.A.		
	Miscibility:	N.A.		
	Fat Solubility:	N.A.		
	Conductivity:	N.A.		
	Substance Groups relevant properties	N.A.		

#### **10. STABILITY AND REACTIVITY**

Reactivity It may generate dangerous reactions (See subsections below) Chemical stability It may generate dangerous reactions (See subsections below) Possibility of hazardous reactions No dangerous reaction is stored and used appropriately. Conditions to avoid Avoid accumulating electrostatic charge. Vapours can form explosive mixtures with air. Incompatible materials Avoid contact with combustible materials. The product could catch fire. Hazardous decomposition products None.

#### **11. TOXICOLOGICAL INFORMATION**

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Information on toxicological effects
Toxicological information of the product:
          N.A.
Toxicological information of the main substances found in the product:
          xylene [isomer mixture] - CAS: 1330-20-7
          a) acute toxicity:
                     Test: LD50 - Route: Inhalation - Species: Rat = 27 mg/l - Duration: 4h
                     Test: LD50 - Route: Oral - Species: Rat = 3523 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit = 12126 mg/kg
          butanone - CAS: 78-93-3
           a) acute toxicity:
                     Test: LD50 - Route: Oral - Species: Rat = 2737 mg/kg
                     Test: LD50 - Route: Skin - Species: Rabbit = 6480 mg/kg
Test: LC50 - Route: Inhalation - Species: Rat = 23.5 mg/l - Duration: 8h
          b) skin corrosion/irritation:
                     Test: Skin Corrosive - Species: Rabbit Negative - Notes: moderatamente irritante
           ethyl acetate - CAS: 141-78-6
          a) acute toxicity:
Test: LD50 - Route: Skin - Species: Rabbit > 20000 mg/kg
                     Test: LD50 - Route: Oral - Species: Rat = 5620 mg/kg
                     Test: LC50 - Route: Inhalation - Species: Rat > 29.3 mg/l - Duration: 4h
Test: LD50 - Route: Oral - Species: Rabbit = 4934 mg/kg body weight
          b) skin corrosion/irritation:
                     Test: Skin Irritant - Route: Skin - Species: Rabbit Negative
           e) germ cell mutagenicity:
                     Test: Genotoxicity Negative
           j) aspiration hazard:
                     Test: Respiratory Tract Corrosive - Route: Inhalation Positive
           n-butyl acetate - CAS: 123-86-4
           a) acute toxicity:
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## PU clear semi sheen top coat

Test: LC50 - Route: Inhalation - Species: Rat > 21 mg/l - Duration: 4h Test: LD50 - Route: Oral - Species: Rat = 10736 mg/kg - Notes: Method OECD linee guide 402 Test: LD50 - Route: Skin - Species: Rabbit > 14000 mg/kg sec-butyl acetate - CAS: 110-19-0 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat 13413 mg/kg Test: LD50 - Route: Skin - Species: Rabbit > 17400 mg/kg Test: LC50 - Route: Inhalation - Species: Rat > 30 mg/l - Duration: 6h ethylbenzene - CAS: 100-41-4 a) acute toxicity: Test: LD50 - Route: Skin - Species: Rabbit = 15400 mg/kg Test: LC50 - Route: Inhalation - Species: Rat = 4000 Ppm - Duration: 4h d) respiratory or skin sensitisation: Test: Skin Sensitization - Route: Skin - Species: Cavia porcellus Negative propan-2-ol - CAS: 67-63-0 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat = 5045 mg/kg Test: LD50 - Route: Skin - Species: Rat = 12800 mg/kg Test: LC50 - Route: Inhalation - Species: Rat = 72000 mg/m3 - Duration: 4h toluene - CAS: 108-88-3 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat 636 mg/kg Test: LD50 - Route: Skin - Species: Rabbit 12267 mg/kg Test: LC50 - Route: Inhalation - Species: Rat 25.7 mg/l - Duration: 4h Poly(oxy-1,2-ethanediyl), alpha-[3-[3-(2h-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-omega-hydroxy-]- -CAS: 104810-48-2 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg - Source: (OECD Guideline 401) - Notes: No mortality was observed Test: LC0 - Route: Inhalation - Species: Rat > 5.8 mg/l - Duration: 14 d - Notes: No mortality was observed Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: (OECD Guideline 402) - Notes: No mortality was observed b) skin corrosion/irritation: Test: Skin Irritant - Species: Rabbit Negative - Source: (OECD Guideline 405) - Notes: Assesment of irritating effects: may cause slight irritation to the skin. c) serious eye damage/irritation: Test: Eye Irritant - Species: Rabbit Negative - Source: (OECD Guideline 404) - Notes: Assesment of irritating effects: May cause slight irritation to the eyes d) respiratory or skin sensitisation: Test: Skin Sensitization - Species: Cavia porcellus Positive - Source: (OECD Guideline 405 Polv(oxy-1,2-ethanediyl), a-[3-[3-(2h-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-omega-[3-[3-(2h-benzotriazol-2-yl)-5-(1,1-dimethylet hyl)-4-hydroxypheny - CAS: 104810-47-1 a) acute toxicity: Test: LD50 - Route: Oral - Species: Rat > 5000 mg/kg - Source: (OECD Guideline 401) - Notes: No mortality was observed Test: LC0 - Route: Inhalation - Species: Rat > 5.8 mg/l - Duration: 14 d - Notes: No mortality was observed Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: (OECD Guideline 402) - Notes: No mortality was observed b) skin corrosion/irritation: Test: Skin Irritant - Species: Rabbit Negative - Source: (OECD Guideline 405) - Notes: Assesment of irritating effects: may cause slight irritation to the skin. c) serious eye damage/irritation: Test: Eye Irritant - Species: Rabbit Negative - Source: (OECD Guideline 404) - Notes: Assesment of irritating effects: May cause slight irritation to the eyes d) respiratory or skin sensitisation Test: Skin Sensitization - Species: Cavia porcellus Positive - Source: (OECD Guideline 405 Substance(s) listed on the NTP report on Carcinogens: None Substance(s) listed on the IARC Monographs: xylene [isomer mixture] -Group 3 ethylbenzene - Group 2B propan-2-ol - Group 3 toluene - Group 3 Substance(s) listed as OSHA Carcinogen(s): None Substance(s) listed as NIOSH Carcinogen(s): None

#### 12. ECOLOGICAL INFORMATION Ecotoxicity

Ádopt good working practices, so that the product is not released into the environment. xylene [isomer mixture] - CAS: 1330-20-7 a) Aquatic acute toxicity:

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## PU clear semi sheen top coat

Endpoint: EC50 - Species: Daphnia = 1 mg/l - Duration h: 48 Endpoint: LC50 - Species: Fish = 3.2 mg/l - Duration h: 96 Endpoint: LC50 - Species: Algae = 2.6 mg/l - Duration h: 73 butanone - CAS: 78-93-3 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish > 3220 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia > 520 mg/l - Duration h: 48 ethyl acetate - CAS: 141-78-6 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 454.7 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia = 154 mg/l - Duration h: 48 Endpoint: EC50 - Species: Algae = 3300 mg/l - Duration h: 48 b) Aquatic chronic toxicity: Endpoint: NOEC - Species: Algae > 100 mg/l - Duration h: 72 n-butyl acetate - CAS: 123-86-4 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 64 mg/l - Duration h: 48 Endpoint: EC50 - Species: Daphnia = 73 mg/l - Duration h: 24 Endpoint: EC50 - Species: Algae = 674 mg/l - Duration h: 72 sec-butyl acetate - CAS: 110-19-0 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 17 mg/l - Duration h: 96 Endpoint: EC50 - Species: Daphnia = 25 mg/l - Duration h: 48 Endpoint: LC50 - Species: Algae = 370 mg/l - Duration h: 72 b) Aquatic chronic toxicity: Endpoint: NOEC - Species: Daphnia = 23 mg/l - Duration h: 504 c) Bacteria toxicity: Endpoint: EC50 - Species: Active mud = 1886 mg/l - Duration h: 6 ethylbenzene - CAS: 100-41-4 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 42.3 mg/l - Duration h: 96 propan-2-ol - CAS: 67-63-0 a) Aquatic acute toxicity: Endpoint: LC50 - Species: Fish = 9640 mg/l - Duration h: 96 Endpoint: LC50 - Species: Daphnia > 1000 mg/l - Duration h: 24 b) Aquatic chronic toxicity Endpoint: NOEC - Species: Daphnia = 30 mg/l - Duration h: 504 - Notes: Prova semistatica c) Bacteria toxicity: Endpoint: EC50 - Species: Active mud > 1000 mg/l e) Plant toxicity: Endpoint: NOEC - Species: Algae = 1800 mg/l - Duration h: 168 - Notes: Prova statica, inibizione della crescita toluene - CAS: 108-88-3 a) Aquatic acute toxicity: Endpoint: EC50 - Species: Algae = 12500 Ppm - Duration h: 72 Endpoint: EC50 - Species: Algae > 433 Ppm - Duration h: 96 b) Aquatic chronic toxicity: Endpoint: NOEC - Species: Daphnia = 1000 Ppm - Duration h: 504 Poly(oxy-1,2-ethanediyl), alpha-[3-[3-(2h-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-omega-hydroxy-]--CAS: 104810-48-2 a) Aquatic acute toxicity: Species: Daphnia = 1 mg/l - Notes: 21 d Poly(oxy-1,2-ethanediyl), a) Aquatic acute toxicity: Species: Daphnia = 1 mg/l - Notes: 21 d Persistence and degradability N.A Bioaccumulative potential N.A. Mobility in soil N.A. Other adverse effects None

#### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment and disposal methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

#### **14. TRANSPORT INFORMATION**

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1263	
1263	
1263	
1263	
	Paint Related material
3	
3	
3	
No	
MARPOL 73/78 and	I the IBC Code)
D/E	
D/L	149, B52, IB2, T4, TP1, TP8, TP28
	353
	364
	A72
	8L
	F-E, S-E
	В.
	None
	1263 1263 1263 3 3 3 3

## **15. REGULATORY INFORMATION**

FORMATION
egulations
Toxic Substances Control Act
TSCA inventory: all the components are listed on the TSCA inventory.
TSCA listed substances:
n-butyl acetate is listed in TSCA Section 4, Section 12b
ethylbenzene is listed in TSCA Section 4
toluene is listed in TSCA Section 8a - CAIR.
Superfund Amendments and Reauthorization Act
Section 302 – Extremely Hazardous Substances: no substances listed.
Section 304 – Hazardous substances: no substances listed.
Section 313 – Toxic chemical list: xylene [isomer mixture], ethylbenzene, propan-2-ol, toluene.
A - Comprehensive Environmental Response, Compensation, and Liability Act
Substance(s) listed under CERCLA: xylene [isomer mixture] - Reportable quantity: 100 pounds
butanone - Reportable quantity: 5000 pounds
ethyl acetate - Reportable quantity: 5000 pounds
n-butyl acetate - Reportable quantity: 5000 pounds
sec-butyl acetate - Reportable quantity: 5000 pounds
ethylbenzene - Reportable quantity: 1000 pounds
toluene - Reportable quantity: 1000 pounds.
Reportable quantity for mixture: 431.732326 pounds. Clean Air Act
CAA listed substances:
xylene [isomer mixture] is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON
butanone is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON
ethyl acetate is listed in CAA Section 111
n-butyl acetate is listed in CAA Section 111
sec-butyl acetate is listed in CAA Section 111
ethylbenzene is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON
propan-2-ol is listed in CAA Section 111
toluene is listed in CAA Section 111, Section 112(b) - HAP, Section 112(b) - HON.
Clean Water Act
CWA listed substances:
xylene [isomer mixture] is listed in CWA Section 311, Section 304
ethyl acetate is listed in CWA Section 304



### PU clear semi sheen top coat

n-butyl acetate is listed in CWA Section 311, Section 304 sec-butyl acetate is listed in CWA Section 311 ethylbenzene is listed in CWA Section 311, Section 304, Section 307 propan-2-ol is listed in CWA Section 304 toluene is listed in CWA Section 311, Section 304, Section 307. USA - State specific regulations California Proposition 65 Substance(s) listed under California Proposition 65: ethylbenzene - Listed as carcinogen toluene - Listed as reproductive toxicant. Massachusetts Right to know Substance(s) listed under Massachusetts Right to know: xylene [isomer mixture] butanone ethyl acetate n-butyl acetate sec-butyl acetate ethylbenzene propan-2-ol toluene. New Jersey Right to know Substance(s) listed under New Jersey Right to know: xylene [isomer mixture] butanone ethyl acetate n-butyl acetate sec-butyl acetate ethylbenzene propan-2-ol toluene. Pennsylvania Right to know Substance(s) listed under Pennsylvania Right to know: xylene [isomer mixture] butanone ethyl acetate n-butyl acetate sec-butyl acetate ethylbenzene propan-2-ol toluene

#### **16. OTHER INFORMATION**

Text of phrases referred to under heading 3:

- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure. H315 Causes skin irritation.
- H312 Harmful in contact with skin.
- H332 Harmful if inhaled.
- H225 Highly flammable liquid and vapour.
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer. H361 Suspected of damaging fertility or the unborn child. H317 May cause an allergic skin reaction.
- H401 Toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

Safety Data Sheet dated 2/12/2018, version 4

Disclaimer:

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process. This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.



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EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average