

## 1 Identification

· **Product identifier**

- *Product number* TR1688
- *Trade name:* **PE CLEAR TOPCOAT 100SH**
  - *Article number:* LRA25131
  - *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  
1.3.2 Importer

Name I.C.& S. DISTRIBUTING CO.  
Address P.O.BOX 10845  
LANCASTER. PA  
USA  
E-Mail: nelson@ics-company.com

· *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.  
001 813-248-0585

## 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.
Sensitization - Skin 1	H317 May cause an allergic skin reaction.
Carcinogenicity 1B	H350 May cause cancer.
Toxic to Reproduction 2	H361 Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity - Repeated Exposure 1	H372 Causes damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.

· **Label elements**

· *GHS label elements*

The product is classified and labeled according to the Globally Harmonized System (GHS).

· *Hazard pictograms*



GHS02 GHS07 GHS08

· *Signal word* Danger

· *Hazard-determining components of labeling:*

styrene  
maleic anhydride

**Product number TR1688**  
**Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 1)

- **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.
  - H372 Causes damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.
  - H412 Harmful to aquatic life with long lasting effects.
- **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)**



· **HMIS-ratings (scale 0 - 4)**



**3 Composition/information on ingredients**

· **Chemical characterization: Mixtures**






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

· **Dangerous components:**

100-42-5	styrene <ul style="list-style-type: none"> <li>⚠ Flammable Liquids 3, H226</li> <li>⚠ Carcinogenicity 1B, H350; Toxic to Reproduction 2, H361; Specific Target Organ Toxicity - Repeated Exposure 1, H372</li> <li>⚠ Acute Toxicity - Inhalation 4, H332; Skin Irritation 2, H315; Eye Irritation 2A, H319</li> <li>Aquatic Chronic 3, H412</li> </ul>	30-39.99%
123-86-4	n-butyl acetate <ul style="list-style-type: none"> <li>⚠ Flammable Liquids 3, H226</li> <li>⚠ Specific Target Organ Toxicity - Single Exposure 3, H336</li> </ul>	5-9.99%
78-93-3	butanone <ul style="list-style-type: none"> <li>⚠ Flammable Liquids 2, H225</li> <li>⚠ Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336</li> </ul>	0.5-1%

(Contd. on page 3)

**Product number TR1688**  
**Trade name: PE CLEAR TOPCOAT 100SH**

		(Contd. of page 2)
57-55-6	propane-1,2-diol	<0.5%
110-19-0	isobutyl acetate <ul style="list-style-type: none"> <li> Flammable Liquids 2, H225</li> <li> Specific Target Organ Toxicity - Single Exposure 3, H336</li> </ul>	<0.5%
108-31-6	maleic anhydride <ul style="list-style-type: none"> <li> Sensitization - Respiratory 1, H334</li> <li> Skin Corrosion 1B, H314</li> <li> Acute Toxicity - Oral 4, H302; Sensitization - Skin 1, H317</li> </ul>	≥0.001-<0.1%

#### 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.

· **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.

(Contd. on page 4)

**Product number TR1688**  
**Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 3)

· **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 product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to Section 13.  
Ensure adequate ventilation.

· **Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· PAC-1:		
100-42-5	styrene	20 ppm
123-86-4	n-butyl acetate	5 ppm
78-93-3	butanone	200 ppm
57-55-6	propane-1,2-diol	30 mg/m
110-19-0	isobutyl acetate	450 ppm
· PAC-2:		
100-42-5	styrene	130 ppm
123-86-4	n-butyl acetate	200 ppm
78-93-3	butanone	2700* ppm
57-55-6	propane-1,2-diol	1,300 mg/m
110-19-0	isobutyl acetate	1300* ppm
· PAC-3:		
100-42-5	styrene	1100* ppm
123-86-4	n-butyl acetate	3000* ppm
78-93-3	butanone	4000* ppm
57-55-6	propane-1,2-diol	7,900 mg/m
110-19-0	isobutyl acetate	7500** ppm

## 7 Handling and storage

· **Handling:**

· **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.

(Contd. on page 5)

**Product number TR1688****Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 4)

- 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:**

### 100-42-5 styrene

PEL	Long-term value: 100 ppm Ceiling limit value: 200; 600* ppm *5-min peak in any 3 hrs
REL	Short-term value: 425 mg/m , 100 ppm Long-term value: 215 mg/m , 50 ppm
TLV	Short-term value: 20 ppm Long-term value: 10 ppm BEI, OTO, A3

### 123-86-4 n-butyl acetate

PEL	Long-term value: 710 mg/m , 150 ppm
REL	Short-term value: 950 mg/m , 200 ppm Long-term value: 710 mg/m , 150 ppm
TLV	Short-term value: 150 ppm Long-term value: 50 ppm

### 78-93-3 butanone

PEL	Long-term value: 590 mg/m , 200 ppm
REL	Short-term value: 885 mg/m , 300 ppm Long-term value: 590 mg/m , 200 ppm
TLV	Short-term value: 300 ppm Long-term value: 200 ppm BEI

(Contd. on page 6)

**Product number TR1688****Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 5)

**57-55-6 propane-1,2-diol**

WEEL Long-term value: 10 mg/m

**110-19-0 isobutyl acetate**

PEL Long-term value: 700 mg/m , 150 ppm

REL Long-term value: 700 mg/m , 150 ppm

TLV Short-term value: 150 ppm

Long-term value: 50 ppm

**108-31-6 maleic anhydride**

PEL Long-term value: 1 mg/m , 0.25 ppm

REL Long-term value: 1 mg/m , 0.25 ppm

TLV Long-term value: 0.01\* mg/m

DSEN, RSEN; \*inh. fraction + vapor, A4

**· Ingredients with biological limit values:****100-42-5 styrene**

BEI 400 mg/g creatinine

Medium: urine

Time: end of shift

Parameter: Mandelic acid plus phenylglyoxylic acid (nonspecific)

40 g/L

Medium: urine

Time: end of shift

Parameter: Styrene

**78-93-3 butanone**

BEI 2 mg/L

Medium: urine

Time: end of shift

Parameter: Methyl ethyl ketone (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.

**· Breathing equipment:**

Short term filter device:



Suitable respiratory protective device recommended.

Filter A

**· Protection of hands:**

Protective gloves

(Contd. on page 7)



**Product number TR1688**  
**Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 6)

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:**

Strong

· **Odor threshold:**

Not determined.

· **pH-value:**

Mixture is non-polar/aprotic.

· **Change in condition**

· **Melting point/Melting range:**

Undetermined.

· **Boiling point/Boiling range:**

124-128 °C (255.2-262.4 °F)

· **Flash point:**

-4 °C (24.8 °F)

· **Flammability (solid, gaseous):**

Not applicable.

· **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:**

1.2 Vol %

· **Upper:**

8.9 Vol %

· **Vapor pressure at 20 °C (68 °F):**

10.7 hPa (8 mm Hg)

· **Density (+/- 0,03) at 20 °C (68 °F):**

1.009 g/cm (8.42 lbs/gal)

· **Relative density**

Not determined.

· **Vapor density**

Not determined.

· **Evaporation rate**

Not determined.

(Contd. on page 8)

**Product number TR1688****Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 7)

· <b>Solubility in / Miscibility with</b>		
· <b>Water:</b>	Not miscible or difficult to mix.	
· <b>Partition coefficient (n-octanol/water):</b> Not determined.		
· <b>Viscosity:</b>		
· <b>Dynamic:</b>	Not determined.	
· <b>Kinematic at 20 °C (68 °F):</b>	40 s (ISO 4 mm)	
· <b>Oxidising properties:</b>	N.A.	
· <b>Solvent content:</b>		
· <b>VOC content:</b>	40.44 % 408.1 g/l / 3.41 lb/gal	
· <b>Solids content:</b> 91.4 %		
· <b>Other information (HAPS)</b>		
100-42-5	styrene	30-39.99%
1330-20-7	xylene	<0.1%
122-99-6	2-Phenoxyethanol	<0.1%
108-31-6	maleic anhydride	≥0.001-<0.1%
100-41-4	ethylbenzene	<0.1%
67-56-1	methanol	<0.1%
108-88-3	toluene	<0.01%
· <b>Other information</b>		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.
- **Possibility of hazardous reactions** 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:** No dangerous decomposition products known.

## 11 Toxicological information

### · Information on toxicological effects

#### · Acute toxicity:

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

#### **ATE (Acute Toxicity Estimate)**

Inhalative	LC50/4 h	36.4 mg/l (mouse)
------------	----------	-------------------

#### **100-42-5 styrene**

Oral	LD50	5,000 mg/kg (mouse)
Dermal	LD50	2,001 mg/kg (mouse)
Inhalative	LC50/4 h	11.8 mg/l (mouse)

#### **123-86-4 n-butyl acetate**

Oral	LD50	10,760 mg/kg (mouse)
------	------	----------------------

(Contd. on page 9)



**Product number TR1688****Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 8)

Dermal	LD50	14,000 mg/kg (rabbit)
Inhalative	LC50/4 h	21.1 mg/l (mouse)
<b>78-93-3 butanone</b>		
Oral	LD50	2,001 mg/kg (mouse)
Dermal	LD50	5,001 mg/kg (rabbit)
Inhalative	LC50/4 h	21 mg/l (mouse)
<b>57-55-6 propane-1,2-diol</b>		
Oral	LD50	20,000 mg/kg (mouse)
Dermal	LD50	2,001 mg/kg (mouse)
<b>110-19-0 isobutyl acetate</b>		
Oral	LD50	13,400 mg/kg (mouse)
Dermal	LD50	17,401 mg/kg (rabbit)
Inhalative	LC50/4 h	31 mg/l (mouse)
<b>108-31-6 maleic anhydride</b>		
Oral	LD50	1,090 mg/kg (mouse)
Dermal	LD50	2,620 mg/kg (rabbit)

- **Primary irritant effect:**

- *on the skin:* Irritant to skin and mucous membranes.
- *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 cancer.

Suspected of damaging fertility or the unborn child.

Causes damage to the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.

- **Carcinogenic categories**

**Styrene**

An increased incidence of lung tumors was observed in mice from an inhalation study on styrene. The relevance of this finding to humans is uncertain since data from mode of action investigations of mouse lung tumors coupled with other long-term animal studies and epidemiology studies of workers exposed to styrene do not provide a basis to conclude that styrene is carcinogenic.

**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 of ethylbenzene.

- **IARC (International Agency for Research on Cancer - Cl. 1 and 2)**

100-42-5 styrene

2A

(Contd. on page 10)

**Product number TR1688**
**Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 9)

100-41-4 ethylbenzene

2B

· *NTP (National Toxicology Program)*

100-42-5 styrene

30-39.99%

· *OSHA-Ca (Occupational Safety & Health Administration)*

None of the ingredients is listed.

## 12 Ecological information

 · **Toxicity** Harmful to aquatic life with long lasting effects.

 · *Aquatic toxicity:*
**100-42-5 styrene**

EC50	4.9 mg/l (algae) (72 h)
	4.7 mg/l (daphnia) (48 h)
LC50 (96h)	4.02 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)

**57-55-6 propane-1,2-diol**

EC50	19,000 mg/l (algae) (48 h)
	18,340 mg/l (daphnia) (48 h)
LC50 (96h)	40,613 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)

**108-31-6 maleic anhydride**

EC50	29 mg/l (algae) (72 h)
	42.8 mg/l (daphnia) (48 h)
LC50 (96h)	75 mg/l (Fish)

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

 · *Substances Easily biodegradable*

100-42-5	styrene	.
123-86-4	n-butyl acetate	.
78-93-3	butanone	.

 · **Behavior in environmental systems:**

 · *Bioaccumulative potential* No further relevant information available.

 · *Mobility in soil* No further relevant information available.

 · **Ecotoxicological effects:**

 · *Remark:* Harmful to fish

(Contd. on page 11)

**Product number TR1688**  
**Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 10)

· **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.  
 Harmful to aquatic organisms

· **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

· IMDG, IATA



· Class

3 Flammable liquids

· Label

3

· **Packing group**

· DOT, IMDG, IATA

II

(Contd. on page 12)

**Product number TR1688**  
**Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 11)

**· Environmental hazards:**

· Marine pollutant: No

**· Special precautions for user**

Warning: Flammable liquids

· Hazard identification number (Kemler code): 33

· EMS Number: F-E, S-E

· Stowage Category: B

**· 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: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**· UN "Model Regulation":**

UN 1263 PAINT, 3, II

## 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) :**

100-42-5	styrene	30-39.99%
1330-20-7	xylene	<0.1%
122-99-6	2-Phenoxyethanol	<0.1%
108-31-6	maleic anhydride	≥0.001-<0.1%
100-41-4	ethylbenzene	<0.1%
67-56-1	methanol	<0.1%
108-88-3	toluene	<0.01%
1338-02-9	Naphthenic acids, copper salts	<0.01%
142-71-2	copper di(acetate)	<0.01%

**· TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

**· Hazardous Air Pollutants**

100-42-5	styrene
1330-20-7	xylene
108-31-6	maleic anhydride
100-41-4	ethylbenzene
67-56-1	methanol

(Contd. on page 13)

**Product number TR1688****Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 12)

108-88-3	toluene		
----------	---------	--	--

· **Proposition 65**

· **Chemicals known to cause cancer:**

100-42-5	styrene	*	30-39.99%
100-41-4	ethylbenzene	*	<0.1%

· **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:**

67-56-1	methanol		<0.1%
108-88-3	toluene		<0.01%

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

78-93-3	butanone	I	0.5-1%
1330-20-7	xylene	I	<0.1%
100-41-4	ethylbenzene	D	<0.1%
108-88-3	toluene	II	<0.01%

· **TLV (Threshold Limit Value)**

100-42-5	styrene	A4
1330-20-7	xylene	A4
108-31-6	maleic anhydride	A4
100-41-4	ethylbenzene	A3

· **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** 09/08/2022 / 10

· **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)

(Contd. on page 14)

**Product number TR1688**
**Trade name: PE CLEAR TOPCOAT 100SH**

(Contd. of page 13)

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 &amp; 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 - Inhalation 4: Acute toxicity . Category 4

Skin Corrosion 1B: Skin corrosion/irritation . Category 1B

Skin Irritation 2: Skin corrosion/irritation . Category 2

Eye Irritation 2A: Serious eye damage/eye irritation . Category 2A

Sensitization - Respiratory 1: Respiratory sensitisation . Category 1

Sensitization - Skin 1: Skin sensitisation . Category 1

Carcinogenicity 1B: Carcinogenicity . Category 1B

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 1: Specific target organ toxicity (repeated exposure) . Category 1

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.**