

1 Identification

- **Product identifier**

- *Product number* PD12Y21
- *Trade name:* **GOLD PATINA**
- *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.
Carcinogenicity 2	H351 Suspected of causing cancer.
Toxic to Reproduction 2	H361 Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity - Single Exposure 3	H336 May cause drowsiness or dizziness.
Specific Target Organ Toxicity - Repeated Exposure 2	H373 May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Oral and Inhalation.
Aspiration Hazard 1	H304 May be fatal if swallowed and enters airways.
Aquatic Acute 2	H401 Toxic to aquatic life.
Aquatic Chronic 2	H411 Toxic 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 GHS09

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· **Signal word** Danger

· **Hazard-determining components of labeling:**

toluene
 xylene
 acetone
 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.
 H336 May cause drowsiness or dizziness.
 H373 May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Oral and Inhalation.
 H304 May be fatal if swallowed and enters airways.
 H401 Toxic to aquatic life.
 H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P301+P310 If swallowed: Immediately call a poison center/doctor.
 P321 Specific treatment (see on this label).
 P331 Do NOT induce vomiting.
 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.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 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)**

HEALTH	2	Health = 2
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

3 Composition/information on ingredients

























· **Chemical characterization: Mixtures**

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

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· Dangerous components:		
64-17-5	ethanol  Flammable Liquids 2, H225  Eye Irritation 2A, H319	40-49.99%
67-64-1	acetone  Flammable Liquids 2, H225  Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	15-19.99%
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	10-12.49%
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	5-9.99%
7440-50-8	copper  Aquatic Chronic 2, H411	5-9.99%
7440-66-6	zinc powder -zinc dust (stabilized)  Aquatic Acute 1, H400; Aquatic Chronic 1, H410	2.5-4.99%
78-93-3	butanone  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	1-2.49%
110-19-0	isobutyl acetate  Flammable Liquids 2, H225  Specific Target Organ Toxicity - Single Exposure 3, H336	1-2.49%
	Salt of polyamine amide (72243/00 / 2008.0023, Germany)  Skin Irritation 2, H315	1-2.49%
67-63-0	propan-2-ol  Flammable Liquids 2, H225  Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	<0.5%
	Octadecanoic acid, 12-hydroxy-, reaction products with hexamethylenediamine (E96096)  Specific Target Organ Toxicity - Repeated Exposure 2, H373  Sensitization - Skin 1B, H317 Aquatic Chronic 4, H413	≥0.1-<0.5%

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108-94-1	cyclohexanone	(Contd. of page 3) <0.5%
	<ul style="list-style-type: none">  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 	

4 First-aid measures

· Description of first aid measures

· General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

personal protective equipment for first aid responders is recommended. (please see section 8)

· After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Take off immediately all contaminated clothing, include underwear and shoes (if necessary).

Rinse thoroughly with plenty of water for at least 20 minutes and take medical advise. If medical advise is needed have products container or label at hand.

· After eye contact:

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

· After swallowing: Do not induce vomiting; immediately call for medical help.

· Information for doctor:

· Most important symptoms and effects, both acute and delayed

For symptoms and effects caused by substances, refer to Section 11.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

· Extinguishing media

· Suitable extinguishing agents:

Alcohol resistant foam

Alcohol resistant foam, CO, powder, water spray/mist.

· 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 (NO_x)

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.

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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.

Dilute with plenty of water.

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:

64-17-5	ethanol	1,800 ppm
67-64-1	acetone	200 ppm
108-88-3	toluene	67 ppm
1330-20-7	xylene	130 ppm
7440-50-8	copper	3 mg/m
7440-66-6	zinc powder -zinc dust (stabilized)	6 mg/m
78-93-3	butanone	200 ppm
100-41-4	ethylbenzene	33 ppm
110-19-0	isobutyl acetate	450 ppm
67-63-0	propan-2-ol	400 ppm
108-94-1	cyclohexanone	60 ppm

· PAC-2:

64-17-5	ethanol	3300* ppm
67-64-1	acetone	3200* ppm
108-88-3	toluene	560 ppm
1330-20-7	xylene	920* ppm
7440-50-8	copper	33 mg/m
7440-66-6	zinc powder -zinc dust (stabilized)	21 mg/m
78-93-3	butanone	2700* ppm
100-41-4	ethylbenzene	1100* ppm
110-19-0	isobutyl acetate	1300* ppm
67-63-0	propan-2-ol	2000* ppm
108-94-1	cyclohexanone	830 ppm

· PAC-3:

64-17-5	ethanol	15000* ppm
67-64-1	acetone	5700* ppm

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		(Contd. of page 5)
108-88-3	toluene	3700* ppm
1330-20-7	xylene	2500* ppm
7440-50-8	copper	200 mg/m
7440-66-6	zinc powder -zinc dust (stabilized)	120 mg/m
78-93-3	butanone	4000* ppm
100-41-4	ethylbenzene	1800* ppm
110-19-0	isobutyl acetate	7500** ppm
67-63-0	propan-2-ol	12000** ppm
108-94-1	cyclohexanone	5000* 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 other constituents have no known exposure limits.

64-17-5 ethanol

PEL Long-term value: 1900 mg/m, 1000 ppm

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REL Long-term value: 1900 mg/m , 1000 ppm
 TLV Short-term value: 1000 ppm
 A3

67-64-1 acetone

PEL Long-term value: 2400 mg/m , 1000 ppm
 REL Long-term value: 590 mg/m , 250 ppm
 TLV Short-term value: 500 ppm
 Long-term value: 250 ppm
 A4, BEI

108-88-3 toluene

PEL Long-term value: 200 ppm
 Ceiling limit value: 300; 500* ppm
 *10-min peak per 8-hr shift
 REL Short-term value: 560 mg/m , 150 ppm
 Long-term value: 375 mg/m , 100 ppm
 TLV Long-term value: 20 ppm
 BEI, OTO, A4

1330-20-7 xylene

PEL Long-term value: 435 mg/m , 100 ppm
 REL Short-term value: 655 mg/m , 150 ppm
 Long-term value: 435 mg/m , 100 ppm
 TLV Short-term value: (150) ppm
 Long-term value: (100) NIC-20 ppm
 BEI, A4

7440-50-8 copper

PEL Long-term value: 1* 0.1** mg/m
 as Cu *dusts and mists **fume
 REL Long-term value: 1* 0.1** mg/m
 as Cu *dusts and mists **fume
 TLV Long-term value: 1* 0.2** mg/m
 *dusts and mists; **fume; as Cu

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

100-41-4 ethylbenzene

PEL Long-term value: 435 mg/m , 100 ppm
 REL Short-term value: 545 mg/m , 125 ppm
 Long-term value: 435 mg/m , 100 ppm
 TLV Long-term value: 20 NIC-20 ppm
 BEI, A3, NIC: OTO, BEI, A3

110-19-0 isobutyl acetate

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

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

TLV Short-term value: 150 ppm

Long-term value: 50 ppm

67-63-0 propan-2-ol

PEL Long-term value: 980 mg/m , 400 ppm

REL Short-term value: 1225 mg/m , 500 ppm

Long-term value: 980 mg/m , 400 ppm

TLV Short-term value: 400 ppm

Long-term value: 200 ppm

BEI, A4

108-94-1 cyclohexanone

PEL Long-term value: 200 mg/m , 50 ppm

REL Long-term value: 100 mg/m , 25 ppm

Skin

TLV Short-term value: 50 ppm

Long-term value: 20 ppm

Skin, BEI, A3

Ingredients with biological limit values:**67-64-1 acetone**

BEI 25 mg/L

Medium: urine

Time: end of shift

Parameter: Acetone (nonspecific)

108-88-3 toluene

BEI 0.02 mg/L

Medium: blood

Time: prior to last shift of workweek

Parameter: Toluene

0.03 mg/L

Medium: urine

Time: end of shift

Parameter: Toluene

0.3 mg/g creatinine

Medium: urine

Time: end of shift

Parameter: o-Cresol with hydrolysis (background)

1330-20-7 xylene

BEI 1.5 g/g creatinine

Medium: urine

Time: end of shift

Parameter: Methylhippuric acids

78-93-3 butanone

BEI 2 mg/L

Medium: urine

Time: end of shift

Parameter: Methyl ethyl ketone (nonspecific)

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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)

67-63-0 propan-2-ol

BEI 40 mg/L
 Medium: urine
 Time: end of shift at end of workweek
 Parameter: Acetone (background, nonspecific)

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)

· *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:
- Filter AX



Suitable respiratory protective device recommended.

· *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.

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- **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:** 56 °C (132.8 °F)

· **Flash point:** -17 °C (1.4 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 405 °C (761 °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:** 15 Vol %

· **Vapor pressure at 20 °C (68 °F):** 233 hPa (174.8 mm Hg)

· **Density (+/- 0,03) at 20 °C (68 °F):** 0.868 g/cm (7.243 lbs/gal)

- **Relative density** Not determined.
- **Vapor density** Not determined.
- **Evaporation rate** Not determined.

· Solubility in / Miscibility with

· **Water:** Not determined.

· **Partition coefficient (n-octanol/water):** Not determined.

· Viscosity:

- **Dynamic:** Not determined.
- **Kinematic at 20 °C (68 °F):** 29 s (ISO 3 mm)

· **Oxidising properties:** N.A.

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· Solvent content:		
· Water:	0.0 %	
· VOC content:	70.49 %	
	611.9 g/l / 5.11 lb/gal	
· Solids content: 12.5 %		
· Other information (HAPS)		
108-88-3	toluene	10-12.49%
1330-20-7	xylene	5-9.99%
100-41-4	ethylbenzene	1-2.49%
· 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.
- **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	11,317 mg/kg (rabbit)
Inhalative	LC50/4 h	97.7 mg/l (mouse)

64-17-5 ethanol

Oral	LD50	10,470 mg/kg (mouse)
Dermal	LD50	20,000 mg/kg (rabbit)
Inhalative	LC50/4 h	124.7 mg/l (mouse)

67-64-1 acetone

Oral	LD50	5,800 mg/kg (mouse)
Dermal	LD50	20,000 mg/kg (rabbit)
Inhalative	LC50/4 h	76 mg/l (mouse)

108-88-3 toluene

Oral	LD50	5,000 mg/kg (mouse)
Dermal	LD50	12,124 mg/kg (rabbit)

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Inhalative	LC50/4 h	25.7 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)
7440-66-6 zinc powder -zinc dust (stabilized)		
Oral	LD50	2,001 mg/kg (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)
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)
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)
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)
Octadecanoic acid, 12-hydroxy-, reaction products with hexamethylenediamine (E96096)		
Oral	LD50	2,001 mg/kg (mouse)
Dermal	LD50	2,001 mg/kg (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)

- **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 drowsiness or dizziness.
 - May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Oral and Inhalation.
 - May be fatal if swallowed and enters airways.
 - Product contains: Reportable explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 9.

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· Carcinogenic categories

Ethylbenzene

From IARC MONOGRAPHS VOLUME 77/2000

Human carcinogenicity data

Two studies of workers potentially exposed to ethylbenzene in a production plant and a styrene polymerization plant were available. In the first study, no excess of cancer incidence was found but the description of methods was insufficient to allow proper evaluation of this finding. In the second study, no cancer mortality excess was observed during the follow-up of 15 years.

Evaluation

There is inadequate evidence in humans for the carcinogenicity of ethylbenzene. There is sufficient evidence in experimental animals for the carcinogenicity of ethylbenzene.

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

64-17-5	ethanol	1 in alcoholic beverages
100-41-4	ethylbenzene	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 Toxic to aquatic life with long lasting effects.
· Aquatic toxicity:
64-17-5 ethanol

EC50 5,012 mg/l (daphnia) (48 h)

LC50 (96h) 15.3 mg/l (Fish)

67-64-1 acetone

EC50 8,800 mg/l (daphnia)

LC50 (96h) 5,540 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)

1330-20-7 xylene

EC50 2.2 mg/l (algae)

LC50 48h 1 mg/l (daphnia)

LC50 (96h) 2.6 mg/l (Fish)

7440-66-6 zinc powder -zinc dust (stabilized)

EC50 2.8 mg/l (daphnia) (48 h)

LC50 (96h) 7.1 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)

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100-41-4 ethylbenzene

EC50	438 mg/l (algae) (72h)
	1.8 mg/l (daphnia) (48 h)
LC50 (96h)	12.1 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)

Salt of polyamine amide (72243/00 / 2008.0023, Germany)

EC50	31 mg/l (daphnia) (48 h)
LC50 (96h)	49 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)

Octadecanoic acid, 12-hydroxy-, reaction products with hexamethylenediamine (E96096)

EC50	101 mg/l (algae) (72 h)
	101 mg/l (daphnia) (48 h)
LC50 (96h)	101 mg/l (Fish)

108-94-1 cyclohexanone

EC50	101 mg/l (algae) (72 h)
	101 mg/l (daphnia)
LC50 (96h)	527 mg/l (Fish)

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

· **Substances Easily biodegradable**

64-17-5	ethanol	.
67-64-1	acetone	.
108-88-3	toluene	.
1330-20-7	xylene	.
78-93-3	butanone	.
100-41-4	ethylbenzene	.
110-19-0	isobutyl acetate	.

· **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

· **Ecotoxic effects:**

- **Remark:** Toxic for fish

· **Additional ecological information:**· **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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· **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.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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

PAINT, MARINE POLLUTANT

· IATA

PAINT

· **Transport hazard class(es)**

· DOT



· Class

3 Flammable liquids

· Label

3

· Class

3 Flammable liquids

· Label

3

· IMDG



· Class

3 Flammable liquids

· Label

3

· IATA



· Class

3 Flammable liquids

· Label

3

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· Packing group	II
· DOT, IMDG, IATA	
· Environmental hazards:	Product contains environmentally hazardous substances: copper, zinc powder -zinc dust (stabilized)
· Marine pollutant:	Yes Symbol (fish and tree)
· 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:	
· DOT	
· Remarks:	Special marking with the symbol (fish and tree).
· IMDG	
· Limited quantities (LQ)	1L
· 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, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

Requirements of Federal Register

· Various regulations

· SARA

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

None of the ingredients is listed.

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

108-88-3	toluene	10-12.49%
1330-20-7	xylene	5-9.99%
7440-50-8	copper	5-9.99%
7440-66-6	zinc powder -zinc dust (stabilized)	2.5-4.99%
100-41-4	ethylbenzene	1-2.49%
67-63-0	propan-2-ol	<0.5%

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

All components have the value ACTIVE.

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· <i>Hazardous Air Pollutants</i>	
108-88-3	toluene
1330-20-7	xylene
100-41-4	ethylbenzene

· *Proposition 65*

· <i>Chemicals known to cause cancer:</i>			
100-41-4	ethylbenzene	*	1-2.49%

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

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

· <i>Chemicals known to cause developmental toxicity:</i>			
108-88-3	toluene		10-12.49%

· *Carcinogenic categories*

· <i>EPA (Environmental Protection Agency)</i>			
67-64-1	acetone	I	15-19.99%
108-88-3	toluene	II	10-12.49%
1330-20-7	xylene	I	5-9.99%
7440-50-8	copper	D	5-9.99%
7440-66-6	zinc powder -zinc dust (stabilized)	D, I, II	2.5-4.99%
78-93-3	butanone	I	2.5-4.99%
100-41-4	ethylbenzene	D	1-2.49%

· <i>TLV (Threshold Limit Value)</i>		
64-17-5	ethanol	A3
67-64-1	acetone	A4
108-88-3	toluene	A4
1330-20-7	xylene	A4
100-41-4	ethylbenzene	A3
67-63-0	propan-2-ol	A4
108-94-1	cyclohexanone	A3

· <i>NIOSH-Ca (National Institute for Occupational Safety and Health)</i>	
None of the ingredients is listed.	

· *National regulations:*

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

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

16 Other information

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

- **Department issuing SDS:** IVM Chemicals Srl
- **Contact:** See emergency phone
 - **Date of preparation / last revision** 08/15/2022 / 75
 - **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods

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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
 Sensitization - Skin 1B: Skin sensitisation . Category 1B
 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 1: Hazardous to the aquatic environment - acute aquatic hazard . Category 1
 Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard . Category 2
 Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard . Category 3
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard . Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard . Category 2
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard . Category 3
 Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard . Category 4

• **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.**