


1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
 - Trade name: **PERGAQUICK C12 X**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 - No further relevant information available.
- **Application of the substance / the mixture**
 - Accelerator for polymerisation / crosslinking
 - For industrial use
- **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:** PERGAN GmbH
Hilfsstoffe für industrielle Prozesse
Schlavenhorst 71
D-46395 Bocholt
Tel: +49 2871 9902-0
Fax: +49 2871 9902-50
- **Further information obtainable from:**
 - Environment protection / Security of labour
 - Competent person:
 - * Sales Manager Germany: Mr. Ansgar Pappenheim, e-mail: a.pappenheim@pergan.com
 - * Export Sales Manager: Mr. Dr. Thomas Philipps, e-mail: dr.philipps@pergan.com
 - * Environment protection / : Mr. Christoph Wilting, e-mail: c.wilting@pergan.com
 - Security of labour
- **1.4 Emergency telephone number:**
 - Tel: +49 2871 9902-0

* 2 Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
 - Repr. 2 H361f Suspected of damaging fertility.
 - Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
 - Skin Sens. 1 H317 May cause an allergic skin reaction.
 - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 - Xn; Harmful
 - R62: Possible risk of impaired fertility.
 - Xi; Sensitising
 - R43: May cause sensitisation by skin contact.
 - N; Dangerous for the environment
 - R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - **Information concerning particular hazards for human and environment:**
 - The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
 - **Classification system:**
 - The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
 - **Hazard pictograms**
 - The product is classified and labelled according to the CLP regulation.
 - 
 - GHS07 GHS08 GHS09
 - **Signal word**
 - Warning
 - **Hazard-determining components of labelling:**
 - cobalt bis(2-ethylhexanoate)
 - **Hazard statements**
 - H317 May cause an allergic skin reaction.
 - H361f Suspected of damaging fertility.
 - H411 Toxic to aquatic life with long lasting effects.
 - **Precautionary statements**
 - P273 Avoid release to the environment.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 - P272 Contaminated work clothing should not be allowed out of the workplace.
 - P281 Use personal protective equipment as required.
 - P321 Specific treatment (see on this label).
 - P391 Collect spillage.
 - P363 Wash contaminated clothing before reuse.
 - P405 Store locked up.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

* 3 Composition/information on ingredients

· 3.2 Chemical characterization: Mixtures

· Dangerous components:

CAS: 6846-50-0 EINECS: 229-934-9 Reg-No.:01-2119451093-47	1-isopropyl-2,2-dimethyltrimethylene diisobutyrate	80-90%
CAS: 136-52-7 EINECS: 205-250-6 Reg-No.:01-2119524678-29	cobalt bis(2-ethylhexanoate) Xn R62; Xi R43; N R50/53 Repr. 2, H361f; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Eye Irrit. 2, H319; Skin Sens. 1, H317	5-10%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg-No.:01-2119486136-34	xylene Xn R20/21-65; Xi R38 R10 Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2.5-5.0%
CAS: 61789-52-4 EINECS: 263-065-6	Fatty acids, tall-oil, cobalt salts Xn R22; Xi R43; N R51/53 Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Sens. 1, H317	0.1-1.0%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· 4.1 Description of first aid measures

· General information:



Take care of personal protection for the first aider.

· 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.
Take affected persons into fresh air and keep quiet.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.
Immediately remove contaminated clothing.

· After eye contact:

Rinse opened eye for several minutes under running water.

· After swallowing:

If symptoms persist consult doctor.

· 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

· 5.1 Extinguishing media

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· 5.2 Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded.

· 5.3 Advice for firefighters

- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information** Self-protection first!

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

· 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.
Soak up with absorbant material (e. g. Vermiculit) and dispose of in accordance with government regulations.

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- **6.4 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.
In case of large spillage the environmental authority should be informed.

7 Handling and storage

- **7.1 Precautions for safe handling**
 - Prevent formation of aerosols.
 - Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
 - Before break and at the end of work hands should be thoroughly washed.
 - While using do not eat, drink or smoke.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
 - Pay attention to the special requirements of your local authorities for storing dangerous goods.
- **Storage:**
 - Prevent any seepage into the ground.
 - Use only receptacles specifically permitted for this substance/product.
- **Requirements to be met by storerooms and receptacles:**
- **Information about storage in one common storage facility:**
 - Store away from peroxide.
 - Store away from foodstuffs, drinks and feeding stuffs.
- **Further information about storage conditions:** None.
- **Recommended storage temperature (To maintain quality):** +5 +30 °C
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace:

136-52-7 cobalt bis(2-ethylhexanoate)

WEL (Great Britain)	Long-term value: 0.1 mg/m ³ as Co; Carc
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1330-20-7 xylene

WEL (Great Britain)	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
IOELV (EU)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm

· DNELs

6846-50-0 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

Oral	DNEL Longterm System	18.8 mg/kg bw/day (General population)
Dermal	DNEL Longterm System	31.2 mg/kg bw/day (Worker)
Inhalative	DNEL Longterm System	18.8 mg/kg bw/day (General population) 110 mg/m ³ (Worker) 32.6 mg/m ³ (General population)

136-52-7 cobalt bis(2-ethylhexanoate)

Oral	DNEL Longterm System	0.0558 mg/kg bw/day (General population)
Inhalative	DNEL Longterm Local	0.2351 mg/m ³ (Worker) 0.037 mg/m ³ (General population)

1330-20-7 xylene

Dermal	DNEL Longterm System	180 mg/kg bw/day (Worker)
Inhalative	DNEL Acute Local	289 mg/m ³ (Worker)
	DNEL Acute Systemic	289 mg/m ³ (Worker)
	DNEL Longterm System	77 mg/m ³ (Worker)

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· PNECs	
6846-50-0 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate	
PNEC Freshwater	0.014 mg/l (-)
PNEC Freshwater sed	1.15 mg/kg sed dw (-)
PNEC Marinewater	0.0014 mg/l (-)
PNEC STP	3 mg/l (-)
PNEC Soil	0.926 mg/kg soil dw (-)
136-52-7 cobalt bis(2-ethylhexanoate)	
PNEC Freshwater	0.00051 mg/l (-)
PNEC Freshwater sed	9.5 mg/kg sed dw (-)
PNEC Marinewater	0.00236 mg/l (-)
PNEC Marinewater sed	9.5 mg/kg sed dw (-)
PNEC STP	0.37 mg/l (-)
PNEC Soil	7.9 mg/kg soil dw (-)
1330-20-7 xylene	
PNEC Freshwater	0.327 mg/l (-)
PNEC Freshwater sed	12.46 mg/kg sed dw (-)
PNEC Marinewater	0.327 mg/l (-)
PNEC Marinewater sed	12.46 mg/kg sed dw (-)
PNEC STP	6.58 mg/l (-)
PNEC Soil	2.31 mg/kg soil dw (-)

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

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid close or long term contact with the skin.
Do not eat, drink, smoke or sniff while working.
Use skin protection cream for skin protection.
Be sure to clean skin thoroughly after work and before breaks.

· **Respiratory protection:**

Not necessary if room is well-ventilated.
Use suitable respiratory device when it exceed exposure limit and when insufficiently ventilated.



Filter A2

· **Protection of hands:**

Only use chemical-protective gloves with CE-labelling of category III.



Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Protective gloves

· **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.
Butyl rubber, BR
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
Neoprene

· **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:**



Protective work clothing

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9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties	
· General Information	
· Appearance:	
· Form:	Fluid
· Colour:	Violet
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	Not applicable.
· Flash point:	107 °C
· Flammability (solid, gaseous):	Not applicable.
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapour pressure:	Not determined.
· Density at 20 °C:	0.955 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· water:	Undetermined.
· Partition coefficient (n-octanol/water): not determined	
· Viscosity:	
· Dynamic at 20 °C:	11 mPas
· Kinematic:	Not determined.
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No hazardous decomposition products if used and stored according to specifications.
- **Additional information:** Emergency procedures will vary depending on conditions. The customer should have an emergency response plane in place.

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

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

6846-50-0 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate

Oral	LD50	>3200 mg/kg (rattus)
Dermal	LD50	18900 mg/kg (caviinae)
Inhalative	LC50 / 6h	5.3 mg/l (rattus)

1330-20-7 xylene

Oral	LD50	8700 mg/kg (rattus)
Dermal	LD50	2000 mg/kg (cuniculosus)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.

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- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:** The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** Repr. 2

12 Ecological information

· 12.1 Toxicity

· Aquatic toxicity:	
6846-50-0 1-isopropyl-2,2-dimethyltrimethylene diisobutyrate	
EC50 / 48h	1.46 mg/l (daphnia)
LC50 / 96h	1.55 mg/l (pimephales promelas)
136-52-7 cobalt bis(2-ethylhexanoate)	
IC50 / 72h	0.528 mg/l (alga)

· 12.2 Persistence and degradability

No further relevant information available.

· 12.3 Bioaccumulative potential

No further relevant information available.

· 12.4 Mobility in soil

No further relevant information available.

· Ecotoxicological effects:

· **Remark:** Harmful to fish

· Additional ecological information:

· **General notes:** Harmful to aquatic organisms

· 12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· 12.6 Other adverse effects

No further relevant information available.

13 Disposal considerations

· 13.1 Waste treatment methods

· Recommendation



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Waste disposal key:


Please contact your hazardous waste disposers to assign the right EWC-(European waste catalog)-number.

· Uncleaned packaging:

· Recommendation:

This material and its container must be disposed of as hazardous waste.

14 Transport information


· 14.1 UN-Number · ADR, IMDG, IATA	UN3082
· 14.2 UN proper shipping name · ADR · IMDG · IATA	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (cobalt bis(2-ethylhexanoate)) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (cobalt bis(2-ethylhexanoate)), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (cobalt bis(2-ethylhexanoate))
· 14.3 Transport hazard class(es) · ADR 	
· Class	9 (M6) Miscellaneous dangerous substances and articles.

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· Label	9
· IMDG, IATA	
	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9
· 14.4 Packing group	
· ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: cobalt bis(2-ethylhexanoate)
· Marine pollutant:	Yes
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Transport category	3
· Tunnel restriction code	E

15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations:
- Other regulations, limitations and prohibitive regulations
 - Please note: Take care of the respective local regulations.
- 15.2 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.

- Relevant phrases
 - H226 Flammable liquid and vapour.
 - H302 Harmful if swallowed.
 - H304 May be fatal if swallowed and enters airways.
 - H312 Harmful in contact with skin.
 - H315 Causes skin irritation.
 - H317 May cause an allergic skin reaction.
 - H319 Causes serious eye irritation.
 - H332 Harmful if inhaled.
 - H335 May cause respiratory irritation.
 - H361f Suspected of damaging fertility.
 - H373 May cause damage to organs through prolonged or repeated exposure.
 - H400 Very toxic to aquatic life.
 - H410 Very toxic to aquatic life with long lasting effects.
 - H411 Toxic to aquatic life with long lasting effects.
 - R10 Flammable.
 - R20/21 Harmful by inhalation and in contact with skin.
 - R22 Harmful if swallowed.
 - R38 Irritating to skin.
 - R43 May cause sensitisation by skin contact.
 - R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - R62 Possible risk of impaired fertility.
 - R65 Harmful: may cause lung damage if swallowed.
- Department issuing MSDS: Environment protection / Security of labour
- Contact: Tel: +49 2871 9902-0
E-mail: mail@pergan.com

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- **Abbreviations and acronyms:** RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
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)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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