

## M-Bond 300 Resin

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

www.vpgsensors.com Date of issue:10/01/2023 Date of First Issue: 20/03/2012

Version 2.0

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name M-Bond 300 Resin
Product Code Not applicable
Unique Formula Identifier (UFI) Not applicable

Nanoform The product does not contain nanoparticles.

1.2 Relevant identified uses of the substance or mixture

and uses advised against

Identified Use(s) Adhesive/Sealants

Uses Advised Against Anything other than the above.

1.3 Details of the supplier of the safety data sheet

Company Identification VISHAY MEASUREMENTS GROUP GMBH

Tatschenweg 1 74078 Heilbronn Deutschland

 Telephone
 +49 (0) 7131 39099-0

 Fax
 +49 (0) 7131 39099-229

 E-Mail (competent person)
 mm.de@vpgsensors

1.4 Emergency telephone number

National Poisons Information Service (United Kingdom) +44 (0) 3448 920111 24 hr. emergency phone number

Healthcare Professionals ONLY

NHS 24 111 Members of Public Emergency Phone No. (00-1) 703-527-3887 CHEMTREC (24 hours)

Languages spoken All official European languages.

## **SECTION 2: HAZARDS IDENTIFICATION**

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP)

Flam. Liq. 3; H226

Asp. Tox. 1; H304

Skin Irrit. 2; H315

Eye Irrit. 2; H319

STOT SE 3; H335

Repr. 1B; H360

STOT RE 1; H372 Aquatic Chronic 3; H412

2.2 Label elements According to Regulation (EC) No. 1272/2008 (CLP)

Product Name M-Bond 300 Resin

Hazard Pictogram(s)







Signal Word(s) DANGER

Contains: Styrene; Silica, Amorphous, Fumed, Cryst.-Free; Cobalt bis(2-ethylhexanoate)

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Hazard Statement(s) H226: Flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation.

H360: May damage fertility or the unborn child.

H372: Causes damage to organs through prolonged or repeated exposure.

H412: Harmful to aquatic life with long lasting effects.

Precautionary Statement(s) P201: Obtain special instructions before use.

P210: Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P260: Do not breathe mist/vapours/spray.

P280: Wear protective gloves/protective clothing and eye/face protection. P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P331: Do NOT induce vomiting.

Supplemental information EUH208: Contains: Cobalt bis(2-ethylhexanoate) May produce an allergic

reaction.

2.3 Other hazards None Known

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1** Substances - Not applicable.

## 3.2 Mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard classification
Styrene	30 - < 50	100-42-5	202-851-5	None assigned	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 Repr. 2; H361d STOT RE 1; H372 (hearing organs) Aquatic Chronic 3; H412
Silica, Amorphous, Fumed, CrystFree	1 - < 5	112945-52-5	601-216-3	None assigned	Skin Irrit. 2;H315 Eye Irrit. 2; H319 STOT SE 3; H335
Cobalt bis(2- ethylhexanoate)	0.5 - < 1	136-52-7	205-250-6	None assigned	Skin Sens. 1A; H317 Eye Irrit. 2; H319 Repr. 1B; H360 Aquatic Acute 1; H400 Aquatic Chronic 3; H412

Note: For full text of H phrases see section 16.

## **SECTION 4: FIRST AID MEASURES**



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### 4.1 Description of first aid measures

Self-protection of the first aider

Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. Avoid exposure during pregnancy. Do not breathe vapour. Do not use mouth-to-mouth resuscitation.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Apply artificial respiration only if patient is not breathing or under medical supervision. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact

IF ON SKIN: Remove contaminated clothing and wash all affected areas with plenty of water. Contaminated clothing should be thoroughly cleaned. If skin irritation or rash occurs: Get medical advice/attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if eye irritation develops or persists.

Ingestion

IF SWALLOWED: Rinse mouth. Do not give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Immediately call a POISON CENTER/doctor.

4.2 Most important symptoms and effects, both acute and delayed

May be fatal if swallowed. Causes skin irritation. Causes eye irritation. May cause respiratory irritation. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. May produce an allergic reaction

4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.

## **SECTION 5: FIREFIGHTING MEASURES**

5.1	Exting	uishing	media
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Suitable Extinguishing media

As appropriate for surrounding fire. Extinguish preferably with foam, carbon dioxide or dry chemical.

Unsuitable extinguishing media

Do not use water jet. Direct water jet may spread the fire.

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour. May decompose in a fire giving off toxic fumes. Carbon dioxide and Carbon monoxide. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback. Sealed containers may rupture explosively if hot.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation. Stop leak if safe to do so. Eliminate all ignition sources if safe to do so. Do not breathe vapour. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See Section: 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

6.2 Environmental precautions

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses. In confined spaces, sewers, etc., the vapours may collect to form explosive mixtures with air. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up Ensure suitable personal protection (including respiratory protection) during removal of spillages. Contain spillages. Use non-sparking equipment when picking up flammable spill. Use waterspray to 'knock down' vapour. Adsorb spillages onto sand, earth or any suitable adsorbent material. Do NOT absorb in saw-dust or other combustible absorbents. Transfer to a container for disposal.

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Ventilate the area and wash spill site after material pick-up is complete. Dispose

of this material and its container as hazardous waste.

6.4 Reference to other sections

See Section: 8, 13

## **SECTION 7: HANDLING AND STORAGE**

7.1 Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions

have been read and understood. Ensure adequate ventilation. Avoid all contact. Do not breathe vapour. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Take precautionary measures against static discharge. Use only non-sparking tools. Do not use compressed air for filling,

discharging or handling.

7.2 Conditions for safe storage, including any Ground/bond container and receiving equipment. Keep only in original container.

Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep away from direct sunlight.

Storage temperature Ambient. Keep at a temperature not exceeding ( $\mathfrak{C}$ ): 25.

Storage life Stable under normal conditions

Incompatible materials Keep away from: Copper, copper alloy, Brass and Polymerisation catalysts such

as peroxy or azo compounds, strong acids, alkalis, oxidising agents and metal

salts.

See Section: 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Specific end use(s)

incompatibilities

### 8.1.1 Occupational Exposure Limits

## United Kingdom

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Styrene	100-42-5	100	430	250	1080	-

Source: UK WEL: Workplace Exposure Limit (UK HSE EH40)

### Ireland

7.3

SUBSTANCE	CAS No.	Occupational Exposure Limit Value (8-hour reference period)		Occupational Exposure Limit Value (15-minute reference period)		Notes
		ppm	mg/m³	ppm	mg/m³	
Styrene	100-42-5	20	85	40	170	-

Source: 2021 Code of Practice for Safety, Health and Welfare at Work (Chemical Agents) Regulation (2001 – 2021) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001 – 2019); Health and Safety Authority

8.1.2 Biological limit value Not established

8.1.3 PNECs and DNELs Not established.

8.2 Exposure controls

**8.2.1 Appropriate engineering controls** Ensure adequate ventilation or use appropriate containment. Atmospheric levels

should be controlled in compliance with the occupational exposure limit. Use nonsparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Guarantee that the eye flushing systems and

safety showers are located close to the working place.

**8.2.2** Individual protection measures, such as personal protective equipment (PPE)

General hygiene measures for the handling of chemicals are applicable. Avoid all contact. Avoid breathing vapours. Wash hands before breaks and after work.

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Keep work clothes separately. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

### Skin protection



### Hand protection:

Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Recommended: PVC / Nitrile rubber.

### **Body protection:**

Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection



Respiratory protection is not necessary if room is well ventilated. Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. Where an air-purifying respirator is suitable, use EN141 or EN143. Recommended: Filter type A (EN141) and Filter type P2 (EN143). Have available emergency self-contained breathing apparatus or full-face airline respirator when using this chemical.

Thermal hazards Not applicable

8.2.3 **Environmental exposure controls**  Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.

Flammable Limits (Lower) (%v/v): 1.1 (Styrene)

32℃ [Closed cup] 490℃ (Styrene)

No data available

No data available

No data available

Insoluble in water.

not applicable

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### 9.1 Information on basic physical and chemical properties

Physical state Liquid Colour Opaque amber Odour Pungent Melting point and freezing point -30℃ (Styrene) Boiling point or initial boiling point and boiling range 146℃ (Styrene)

Flammability No data available Flammable Limits (Upper) (%v/v): 6.1 (Styrene)

Lower and upper explosion limit or lower and upper flammability limit

Flash point Auto-ignition temperature

Decomposition temperature рΗ

Kinematic viscosity Solubility

Partition coefficient: n-octanol/water (log value)

Vapour pressure

Relative vapour density

6.7 hPa (Styrene) 1.08 +/- 0.04 @ 25℃ (Water = 1) Density and/or relative density 3.6 (Air = 1) (Styrene)

Particle characteristics not applicable

#### 9.2 Other information

Explosive properties Not explosive. Not oxidising. Oxidising properties

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Odour threshold 0.2 ppm (Styrene) Evaporation rate 0.49 (Styrene) (BuAc = 1)

Viscosity 450 - 600 cps @ 25℃ (Brookfield Test Result)

## **SECTION 10: STABILITY AND REACTIVITY**

10.1 Reactivity Stable under normal conditions.
 10.2 Chemical stability Stable under normal conditions.

10.3 Possibility of hazardous reactions Highly flammable liquid and vapour. Vapours are heavier than air and may travel

considerable distances to a source of ignition and flashback.

Monitor stored material for loss of inhibitors. The following may occur: Hazardous Polymerization. Susceptible to violent exothermic polymerisation, initiated by

heating or the presence of catalysts. Pressure buildup can be rapid.

10.4 Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Keep away from direct sunlight. Keep at a temperature not

exceeding (℃): 65 (Hazardous Polymerization).

10.5 Incompatible materials Keep away from: Copper, copper alloy, Brass and Polymerisation catalysts such

as peroxy or azo compounds, strong acids, alkalis, oxidising agents and metal

salts.

10.6 Hazardous decomposition product(s) May decompose in a fire giving off toxic fumes. Oxides of carbon and

hydrocarbons.

### **SECTION 11: TOXICOLOGICAL INFORMATION**

## 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

**Acute toxicity** 

Skin Contact

Ingestion Mixture: Based upon the available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: Estimated LD50 > 2000 mg/kg

bw/day.

Inhalation Mixture: Based upon the available data, the classification criteria are not met.

Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20 mg/l. (Vapour) Mixture: Based upon the available data, the classification criteria are not met. Acute Toxicity Estimate Mixture Calculation: Estimated LD50 > 2000 mg/kg

bw/day.

Skin corrosion/irritation Mixture: Skin Irrit. 2: H315: Causes skin irritation.

Styrene Skin Irrit. 2; H315: Causes skin irritation.

**EU Harmonised Classification** 

EU ECHA Registration Endpoint summary

Silica, Amorphous, Fumed, Cryst.-Free Skin Irrit. 2; H315: Causes skin irritation.

EU classification and labelling inventory >1300 Notifiers

Serious eye damage/irritation Mixture: Eye Irrit. 2: Causes serious eye irritation.

Styrene Eye Irrit. 2; H319: Causes serious eye irritation.

EU Harmonised Classification

Test Result: Irritating to eyes. ECHA Registration Endpoint summary

Silica, Amorphous, Fumed, Cryst.-Free Eye Irrit. 2; H319: Causes serious eye irritation.

EU classification and labelling inventory >1300 Notifiers

Cobalt bis(2-ethylhexanoate) Eye Irrit. 2; H319: Causes serious eye irritation.

Test Result: Irritating to eyes. (OECD 405) ECHA Registration Endpoint

summary

Respiratory or skin sensitization Mixture: Based upon the available data, the classification criteria are not met.

EUH208: Contains: Cobalt bis(2-ethylhexanoate) May produce an allergic

reaction.

Cobalt bis(2-ethylhexanoate) Skin Sens. 1: H317: May cause an allergic skin reaction.

Result: Positive - Sensitising (OECD 429) EU ECHA Registration Endpoint summary

Germ cell mutagenicity
Mixture: Based upon the available data, the classification criteria are not met.

Carcinogenicity
Mixture: Based upon the available data, the classification criteria are not met.

Reproductive toxicity
Mixture: Repr. 1B; H360: May damage fertility or the unborn child.

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Cobalt bis(2-ethylhexanoate) Repr. 1B; H360: May damage fertility or the unborn child.

NOAEL: 30mg/kg/day, EU ECHA registration dossier

STOT - single exposure Mixture: STOT SE 3; H335: May cause respiratory irritation.

Styrene STOT SE 3; H335: May cause respiratory irritation.

EU ECHA Registration Endpoint summary: Irritating to eyes, respiratory system

and skin.

**EU Harmonised Classification** 

Silica, Amorphous, Fumed, Cryst.-Free STOT SE 3; H335: May cause respiratory irritation.

EU classification and labelling inventory >1300 Notifiers

STOT - repeated exposure Mixture: Based upon the available data, the classification criteria are not met.

Styrene STOT RE 1; H372: Causes damage to organs through prolonged or repeated

exposure: (Hearing Organs)
EU Harmonised Classification

Aspiration hazard Mixture: Based upon the available data, the classification criteria are not met.

Styrene Asp. Tox. 1; H304: May be fatal if swallowed and enters airways.

Kinematic viscosity 0.77 mm²/s @ 25 ℃

EU ECHA registration dossier

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties This product does not contain a substance that has endocrine disrupting

properties with respect to humans as no components meets the criteria.

11.2.2 Other information None

## **SECTION 12: ECOLOGICAL INFORMATION**

**12.1 Toxicity** Mixture: Aquatic Chronic 3; H412: Harmful to aquatic life with long lasting effects.

Styrene Aquatic Chronic 3; H412: Harmful to aquatic life with long lasting effects.

Chronic Toxicity: NOEC (21d) (Daphnia magna) mg/l 1.01

Chronic Toxicity: NOEC (21d) (Algae) mg/l 0.28

EU Harmonised Classification; EU ECHA registration dossier Cobalt bis(2-ethylhexanoate) Aquatic Chronic 2;H411: Toxic to aquatic life with long lasting effects.

Chronic Toxicity: NOEC (28d) (Daphnia magna) 350mg Co/L

Chronic Toxicity: NOEC (28d) Oncorhynchus mykiss (Rainbow trout) 2100mg

Co/L

Aquatic Acute 1; H400: Very toxic to aquatic life.

Acute toxicity: LC50: 0.8 (Oncorhynchus mykiss (Rainbow trout)) - 85 (Danio rerio

(zebrafish))

EU ECHA registration dossier

**12.2** Persistence and degradability No data for the mixture as a whole.

Styrene Readily biodegradable.

Silica, Amorphous, Fumed, Cryst.-Free No data available

Cobalt bis(2-ethylhexanoate) Biodegradation is not relevant for metals and inorganic substances.

No data for the mixture as a whole.

**12.3 Bioaccumulative potential** No data for the mixture as a whole Styrene Bioconcentration factor (BCF): 74

The substance has low potential for bioaccumulation.

Silica, Amorphous, Fumed, Cryst.-Free No data available

Cobalt bis(2-ethylhexanoate) The substance has low potential for bioaccumulation.

**12.4 Mobility in soil** No data for the mixture as a whole.

Styrene Adsorption to solids will be limited.

Silica, Amorphous, Fumed, Cryst.-Free No data available

Cobalt bis(2-ethylhexanoate) The substance is predicted to have low mobility in soil.

**12.5** Results of PBT and vPvB assessment Not classified as PBT or vPvB.

12.6 Endocrine disrupting properties This product does not contain a substance that has endocrine disrupting

properties with respect to non-target organisms as no components meets the

criteria.

12.7 Other adverse effects None known

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## M-Bond 300 Resin

13.2

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### **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1 Waste treatment methods This material and its container must be disposed of as hazardous waste. Dispose

of wastes in an approved waste disposal facility.

Directive 2008/98/EC (Waste Framework Directive) HP3, HP4, HP5,HP10, HP14

Dispose of contents in accordance with local, state or national legislation.

## **SECTION 14: TRANSPORT INFORMATION**

Additional Information

		ADR/RID	ADN	IMDG	IATA/ICAO	
14.1	UN number or ID number	UN 1133	UN 1133	UN 1133	UN 1133	
14.2	UN proper shipping name	ADHESIVES	ADHESIVES	ADHESIVES	ADHESIVES	
		Containing	Containing	Containing	Containing	
		flammable liquid	flammable liquid	flammable liquid	flammable liquid	
14.3	Transport hazard class(es)	3	3	3	3	
14.4	Packing group	III	III	III	III	
14.5	Environmental hazards	Not applicable	Not applicable	Not classified as	Not applicable	
				a Marine		
				Pollutant.		
14.6	Special precautions for user	See Section: 2				
14.7	Maritime transport in bulk according to IMO	No information ava	ailable.			
	instruments					
14.8	Additional Information	No information ava	ailable.			

## **SECTION 15: REGULATORY INFORMATION**

15.1 Safety, health and environmental

regulations/legislation specific for the substance or mixture

15.1.1 EU regulations

Use restriction according to REACH annex XVII, no.: Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-

Directive]

Directive 2010/75/EU on industrial emissions [Industrial

Emissions Directive]

sions Directivel

Restrictions of occupation:

Not restricted

P5c

VOC-value:

VOC-value %W/W	Temperature	Method
3 - 5	20 ℃	calculated

Observe restrictions to employment for juvenils according to the 'juvenile work

protection guideline' (94/33/EC).

Observe employment restrictions under the Maternity Protection Directive

(92/85/EEC) for expectant or nursing mothers.

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of

workers from the risks related to chemical agents at work

15.1.2 National regulations

Germany

To follow:

Water hazard class (WGK) Water hazard class: 2 (Self classification)

**15.2 Chemical Safety Assessment**A REACH chemical safety assessment has not been carried out.

## **SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements: New SDS Regulation 2020/878 format, all sections have been updated to include new information. Please review SDS with care.

## References:

EU classification and labelling inventory for Silica, Amorphous, Fumed, Cryst.-Free (CAS No. 112945-52-5), Harmonised Classification(s) for Styrene (CAS No. 100-42-5).

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ECHA registration dossier for Cobalt bis(2-ethylhexanoate) (CAS No. 136-52-7), Styrene (CAS No. 100-42-5). Existing Safety Data Sheet (SDS)

EU Classification: This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP)	Classification Procedure
Flam. Liq. 3; H226	Flash Point [Open cup] Test Result/ Boiling Point (℃)
Asp. Tox. 1; H304	Threshold Calculation, Estimated Viscosity
Skin Irrit. 2; H315	Threshold Calculation
Eye Irrit. 2; H319	Threshold Calculation
STOT SE 3; H335	Threshold Calculation
Repr. 1B; H360	Threshold Calculation
Aquatic Chronic 3; H412	Summation Calculation
EUH208: Contains: Cobalt bis(2-ethylhexanoate) May produce an allergic reaction.	

**LEGEND** 

**ADR** European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

**BCF** Bioconcentration factor (BCF)

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL Derived no effect level FU **European Union** EC **European Community ECHA European Chemicals Agency** 

ΕN European Standard Effect concentration; 50 % EC50

IATA International Air Transport Association **ICAO** International Civil Aviation Organization **IMDG** International Maritime Dangerous Goods IMO International Maritime Organization

LC50 Lethal concentration at which 50% of the population is killed

LD50 Lethal dose at which 50% of the population is killed

**LTEL** Long term exposure limit

NOAEC No observed adverse effect concentration NOEC No Observed Effect Concentration

**OECD** Organisation for Economic Cooperation and Development

PBT Persistent, Bioaccumulative and Toxic **PNEC** Predicted No Effect Concentration

**REACH** Registration, Evaluation, Authorisation and Restriction of Chemicals

**RID** Regulations concerning the International Carriage of Dangerous Goods by Rail

**TWA** Time Weighted Average Short term exposure limit STEL

vPvB very Persistent and very Bioaccumulative

UN **United Nations** 

VOC Volatile organic compounds

## Hazard classification / Classification code:

Flam. Liq. 3; Flammable liquid, Category 3

Asp. Tox. 1; Aspiration Toxicity, Category 1 Acute Tox. 4; Acute toxicity, Category 4 Skin Irrit. 2; Skin corrosion/irritation, Category 2

Skin Sens. 1; Skin sensitisation, category 1 Eye Irrit. 2; Serious eye damage/irritation, Category 2

STOT SE 3: Specific target organ toxicity — single exposure, Category 3

Repr. 1B; Reproductive toxicity, Category 1B

## Hazard Statement(s)

H226: Flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H332: Harmful if inhaled.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction. H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H360: May damage fertility or the unborn child.

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STOT RE 1; Specific target organ toxicity — repeated exposure,

Aquatic Acute 1; Hazardous to the aquatic environment, Acute, Category

Aquatic Chronic 3; Hazardous to the aquatic environment, Chronic , Category  $\bf 3$ 

H372: Causes damage to organs through prolonged or repeated

H400: Very toxic to aquatic life.

H412: Harmful to aquatic life with long lasting effects.

EUH208: Contains: Cobalt bis(2-ethylhexanoate) May produce an allergic reaction.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

### **Disclaimers**

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