

Vivacolor Bond

Revision date: 30.08.2019

Product code: 152

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Processing aid

1.3. Details of the supplier of the safety data sheet

Company name:	Jentner Plating Technology GmbH	
Street:	Johann-Staib-Strasse 2	
Place:	D-75179 Pforzheim	
Telephone:	+49 (0)7231 418094 0	Telefax: +49 (0)7231 418094 77
e-mail:	info@jentner.de	
Contact person:	Department of Chemistry	
Internet:	www.jentner.de	
Responsible Department:	Poison Information Center of the University of Freiburg.	

1.4. Emergency telephone number: 0049 (0)761 19240 - 24 h german and english

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Reproductive toxicity: Repr. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Harmful if swallowed or if inhaled.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

May cause respiratory irritation.

Suspected of damaging fertility.

Toxic to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

N,N-Dimethylacrylamid

2,2-Dimethoxy-1,2-diphenylethan-1-on

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane

Signal word: Danger

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Pictograms:**Hazard statements**

H302+H332	Harmful if swallowed or if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of water.
P362+P364	Take off contaminated clothing and wash it before reuse.
P312	Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an officially registered waste disposal company.

2.3. Other hazards

Wassergefährdungsklasse 3 - stark wassergefährdend

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
5888-33-5	exo-1,7,7-Trimethylbicyclo[2.2.1]hept-2-ylacrylat			25-50 %
	227-561-6			
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, Aquatic Chronic 2; H315 H319 H335 H411			
2680-03-7	N,N-Dimethylacrylamid			10-25 %
	220-237-5			
	Acute Tox. 3, Acute Tox. 3, Acute Tox. 4, Eye Irrit. 2; H331 H311 H302 H319			
24650-42-8	2,2-Dimethoxy-1,2-diphenylethan-1-on			2,5-10 %
	246-386-6			
	Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H317 H400 H410			
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			2,5-10 %
	278-355-8	015-203-00-X		
	Repr. 2; H361f			
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane			2,5-10 %
	219-784-2			
	Eye Dam. 1; H318			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

If skin irritation or rash occurs: Get medical advice/attention.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Do NOT induce vomiting.

Call a physician in any case!

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

Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**Carbon dioxide (CO₂).Foam.Extinguishing powder.

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Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to the escape of irritating gases and vapours.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Do not allow water used to extinguish fire to enter drains or waterways.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Keep away from unprotected people. Keep upwind.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Avoid contact with skin and eyes.

Further information on handling

Ensure sufficient ventilation when re-packing damaged packages.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Only use containers specifically approved for the substance/product.

Handle and open container with care.

Further information on storage conditions

Store in a cool dry place.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Additional advice on limit values**

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2. Exposure controls**Appropriate engineering controls**

Technical ventilation of workplace

Protective and hygiene measures

General Precautions for safe handling of chemicals.

Do not eat, drink, smoke or sneeze at the workplace.

Avoid contact with skin, eyes and clothes.

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Eye/face protection

Wear suitable protective clothing and eye/face protection.

Hand protection

The material of the gloves should be enough tight and firm against the used substance.
After cleaning apply high-fat content skin care cream.

Skin protection

According to danger wear tight, adequate long apron and boots or suitable chemical protection suit.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	whitish
Odour:	characteristic
pH-Value:	nicht anwendbar0

Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	> 93 °C
Sublimation point:	not determined
Flash point:	77 °C

Explosive properties

not explosive.

Ignition temperature:	not determined
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Oxidizing properties

Not oxidising.

Density:	1,4 g/cm ³
Water solubility:	unlöslich

Solubility in other solvents

not determined

Flow time:	Daten nicht verfügbar0
Solvent separation test:	not determined

9.2. Other information

Solid content:	5,8 %
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SECTION 10: Stability and reactivity**10.2. Chemical stability**

Stable under normal temperature and compression conditions. Light sensitive.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.5. Incompatible materials

Alkalis (alkalis), concentrated.

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Oxidizing agents, strong.

Strong acid

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if swallowed.

Harmful if inhaled.

Harmful if swallowed or if inhaled.

ATEmix calculated

ATE (oral) 1580,0 mg/kg; ATE (inhalation vapour) 15,00 mg/l; ATE (inhalation aerosol) 2,500 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
5888-33-5	exo-1,7,7-Trimethylbicyclo[2.2.1]hept-2-ylacrylat				
	oral	LD50 mg/kg	4890	Rat	Gestis
	dermal	LD50 mg/kg	>5000	Rabbit	Gestis
2680-03-7	N,N-Dimethylacrylamid				
	oral	LD50 mg/kg	316	Rat	Gestis
	dermal	LD50 mg/kg	519	Rabbit	Gestis
	inhalation vapour	ATE	3 mg/l		
	inhalation aerosol	ATE	0,5 mg/l		
2530-83-8	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane				
	oral	LD50 mg/kg	24200	Rat	
	dermal	LD50 mg/kg	4250	Rabbit	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (2,2-Dimethoxy-1,2-diphenylethan-1-on)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging fertility. (diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)

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

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

STOT-single exposure

May cause respiratory irritation. (exo-1,7,7- Trimethylbicyclo[2.2.1]hept-2-ylacrylat)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

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Aspiration hazard

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information**12.2. Persistence and degradability**

This information is not available.

12.3. Bioaccumulative potential

This information is not available.

12.4. Mobility in soil

This information is not available.

12.5. Results of PBT and vPvB assessment

This information is not available.

12.6. Other adverse effects

This information is not available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of this material and its container to hazardous or special waste collection point.

Waste disposal number of waste from residues/unused products

110198 WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY; wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising); other wastes containing hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

UN 3082

14.2. UN proper shipping name:ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Isobornylacrylat, Ethanone, 2,2-dimethoxy-1,2-diphenyl)**14.3. Transport hazard class(es):**

9

14.4. Packing group:

III

Hazard label:

9



Classification code:

M6

Special Provisions:

274 335 601

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

90

Tunnel restriction code:

E

Inland waterways transport (ADN)

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according to Regulation (EC) No 1907/2006

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14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (Isobornylacrylat, Ethanone, 2,2-dimethoxy-1,2-diphenyl)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



Classification code: M6
 Special Provisions: 274 335 601
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (Isobornylacrylate, Ethanone, 2,2-dimethoxy-1,2-diphenyl)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



Special Provisions: 274, 335
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (Isobornylacrylate, Ethanone, 2,2-dimethoxy-1,2-diphenyl)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



Special Provisions: A97 A158
 Limited quantity Passenger: 30 kg G
 Passenger LQ: Y964
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 964
 IATA-max. quantity - Passenger: 450 L
 IATA-packing instructions - Cargo: 964
 IATA-max. quantity - Cargo: 450 L

14.5. Environmental hazards

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ENVIRONMENTALLY HAZARDOUS: yes

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Water contaminating class (D): 3 - highly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H332	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Repr. 2; H361f	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
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.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Jentner Plating Technology GmbH

Safety Data Sheet

according to Regulation (EC) No 1907/2006



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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)