Safety data sheet
according to 1907/2006/EC (REACH)

Printing date : 01.12.14

* SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name: BPO Paste Hardener .**

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the preparation**
Dibenzoyl peroxide, paste
Hardening agent/ Curing agent
Catalyst

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Automotive Bodydfillers Ltd
Unit 4, Millbuck Way, Sandbach,Cheshire.
CW11 3HT (UK)
Tel.: +44 (0) 1270 766685 - Fax: +44 (0) 1270 766685

· **Further information obtainable from:** E-mail: enquiries@resin-supplies.co.uk

· **1.4 Emergency telephone number:**
Tel. +44 (0) 1270 766685 (Monday-Friday: 09.00-17.00)

Poison Centres - CENTRI ANTIVELENI (h24 - information in italian):
Milano - Ospedale Niguarda - Tel. +39 02 66101029
Pavia - IRCCS Fondazione Maugeri - Tel. +39 0382 24444
Firenze - Azienda Ospedaliera Careggi - Tel. +39 055 4277238

* SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

Org. Perox. EF	H242	Heating may cause a fire.
Aquatic Acute 1	H400	Very toxic to aquatic life.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Xi; Irritant
R36: Irritating to eyes.
Xi; Sensitising
R43: May cause sensitisation by skin contact.
O; Oxidising
R7: May cause fire.
N; Dangerous for the environment
R50: Very toxic to aquatic organisms.
· **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.
The Dibenzoyl Peroxide is classified as Oxidizing because it's strongly desensitized by organic liquids and/or inert solid materials and/or water.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**

GHS02 GHS07 GHS09

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· **Signal word** Warning

· **Hazard-determining components of labelling:**
dibenzoyl peroxide
· **Hazard statements**
H242 Heating may cause a fire.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
· **Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P411+P235	Store at temperatures not exceeding 30 °C. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

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

*
SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Components:**

CAS: 94-36-0 EINECS: 202-327-6 Index number: 617-008-00-0 Reg.nr.: 01-2119511472-50-XXXX	dibenzoyl peroxide Xi R36; Xi R43; E R3; O R7; N R50 Org. Perox. B, H241; Aquatic Acute 1, H400; Eye Irrit. 2, H319; Skin Sens. 1, H317	45-52%
CAS: 131-11-3 EINECS: 205-011-6 Reg.nr.: 01-2119437229-36-XXXX	dimethyl phthalate	25-35%

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

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** Do not induce vomiting; call for medical help immediately.

· **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.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbonic anhydride (CO_2)
Carbon monoxide (CO)

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Benzoic acid
Benzene
Biphenyl
Phenyl benzoate
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.
Mouth respiratory protective device.
Wear suitable fire protection equipment.
· **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Keep away from ignition sources.
Ensure adequate ventilation

· **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Do not allow to dry out
Ensure adequate ventilation.

· **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.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Use only in well ventilated areas.
Ensure good ventilation/exhaustion at the workplace.
Keep away from heat and direct sunlight.
Protect against electrostatic charges.
· **Information about fire - and explosion protection:**
Protect from heat.
Keep ignition sources away - Do not smoke.
Substance/product is oxidizing when dry.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store only in the original receptacle.
· **Information about storage in one common storage facility:**
Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.
· **Further information about storage conditions:**
Keep container tightly sealed.
Protect from heat and direct sunlight.
Store receptacle in a well ventilated area.

The product, stored in the original containers, away from sunlight, maintains its properties for 12 months from the delivery date.

· **7.3 Specific end use(s)** No further relevant information available.

*
SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

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· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
94-36-0 dibenzoyl peroxide	
WEL (Great Britain)	Long-term value: 5 mg/m³
PEL (USA)	Long-term value: 5 mg/m³
REL (USA)	Long-term value: 5 mg/m³
TLV (USA)	Long-term value: 5 mg/m³
131-11-3 dimethyl phthalate	
WEL (Great Britain)	Short-term value: 10 mg/m³ Long-term value: 5 mg/m³
PEL (USA)	Long-term value: 5 mg/m³
REL (USA)	Long-term value: 5 mg/m³
TLV (USA)	Long-term value: 5 mg/m³

· **DNELs**		
94-36-0 dibenzoyl peroxide		
Oral	DNEL/ Long term exposure- Systemic effects	1.65 mg/kg bw/d (general population)
Dermal	DNEL/ Long term exposure- Systemic effects	3.3 mg/kg bw/d (general population)
		6.6 mg/kg bw/d (workers)
Inhalative	DNEL/ Long term exposure- Systemic effects	2.9 mg/m³ (general population)
		11.75 mg/m³ (workers)
131-11-3 dimethyl phthalate		
Oral	DNEL/ Long term exposure- Systemic effects	25 mg/kg bw/d (general population)
Dermal	DNEL/ Long term exposure- Systemic effects	60 mg/kg bw/d (general population)
		100 mg/kg bw/d (workers)
Inhalative	DNEL/ Long term exposure- Systemic effects	86.96 mg/m³ (general population)
		293.86 mg/m³ (workers)

· **PNECs**	
94-36-0 dibenzoyl peroxide	
PNEC/ STP	0.35 mg/l (sewage treatment plant)
PNEC/ sediment	0.338 mg/kg dw (freshwater)
	0.0338 mg/kg dw (marine water)
PNEC/ soil	0.0758 mg/kg dw (-)
PNEC/aqua	0.602 mg/l (freshwater)
	0.602 mg/l (intermittent releases)
	0.0602 mg/l (marine water)
131-11-3 dimethyl phthalate	
PNEC/ STP	4 mg/l (-)
PNEC/ sediment	1.403 mg/kg dw (freshwater)
PNEC/aqua	0.192 mg/l (freshwater)
	0.39 mg/l (intermittent releases)
	0.0192 mg/l (marine water)

· **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.
Do not eat, drink, smoke or sniff while working.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Immediately remove all soiled and contaminated clothing
Do not inhale gases / fumes / aerosols.
Keep away from foodstuffs, beverages and feed.
· **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.

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· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
Neoprene gloves
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**
The exact break 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:** Light weight protective clothing

*
SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
· **Form:**	Pasty
· **Colour:**	Different according to colouring
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
· **Melting point/Melting range:**	Undetermined.
· **Boiling point/Boiling range:**	Undetermined.
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	May cause fire.
· **Ignition temperature:**	
· **Decomposition temperature:**	Not determined. SADT = 50 °C The SADT (self-accelerating decomposition temperature) is an experimentally determined temperature at which the product, in its conventional packaging will decompose in a selfaccelerating reaction.
· **Self-igniting:**	Not determined.
· **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:**	1.1 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
· **water:**	Insoluble.

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

· **Viscosity:**
· **Dynamic:** Not determined.
· **Kinematic:** Not determined.

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
Exothermic thermal decomposition.
Visible decomposition with spontaneous ignition on heating.
SADT = 50 °C
SADT (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport.
A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT.
Contact with incompatible substances can cause decomposition at or below the SADT.

· **10.3 Possibility of hazardous reactions**
Reacts with reducing agents.
Reacts with heavy metals.
Reacts with alkali, amines and strong acids.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:**
Reducing agents like amines, acids, alkali, compounds based on heavy metals (p.e. accelerators)

· **10.6 Hazardous decomposition products:**
Benzoic acid
Benzene
Biphenyl
Phenyl benzoate

*
SECTION 11: Toxicological information

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

· **LD/LC50 values relevant for classification:**		
94-36-0 dibenzoyl peroxide		
Oral	LD0	5000 mg/kg (rat)
Inhalative	LC0	24.3 mg/l (rat)
131-11-3 dimethyl phthalate		
Oral	LD50	>2400 mg/kg (rat)
Dermal	LD50	> 10000 mg/kg (rabbit)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** Irritating effect.
· **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

*
SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:**
No further relevant information available.

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94-36-0 dibenzoyl peroxide	
EC50 / 48h	0.110 mg/l (crustacea - Daphnia magna) (OECD TG 202)
ErC50 / 72h	0.0711 mg/l (algae - Pseudokirchneriella subcapitata) (OECD TG 201)
LC50 / 96h	0.0602 mg/l (fish - Oncorhynchus mykiss) (OECD TG 203)
M Factor	10 (-)
131-11-3 dimethyl phthalate	
EC50 / 48h	52 mg/l (daphnia)
ErC50 / 72h	259.76 mg/l (algae)
LC50 / 96h	39 mg/l (fish)

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

94-36-0 dibenzoyl peroxide	
Ready Biodegradability in water / 28d	68 % (-) (OCDE TGD301 D)
131-11-3 dimethyl phthalate	
Ready Biodegradability in water / 28d	>91 % (-)

· **12.3 Bioaccumulative potential**
No further relevant information available.

94-36-0 dibenzoyl peroxide	
Log Kow	3.2 (-) (OECD TG 117)
131-11-3 dimethyl phthalate	
BCF	57 (fish)
Log Kow	2.12 (-)

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

94-36-0 dibenzoyl peroxide	
Log Koc	3.8 (-) (OCDE TGD 121)
131-11-3 dimethyl phthalate	
Log Koc	1.57 (-)

· **Ecotoxical effects:**
· **Remark:** Very toxic for fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
Very toxic for 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.

SECTION 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.
Disposal must be made according to official regulations.

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

*
SECTION 14: Transport information

· **14.1 UN-Number**
· **ADR, IMDG, IATA** UN3108

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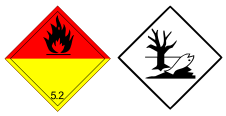
· **14.2 UN proper shipping name**

· **ADR**	3108 ORGANIC PEROXIDE TYPE E, SOLID, ENVIRONMENTALLY HAZARDOUS
· **IMDG**	ORGANIC PEROXIDE TYPE E, SOLID, MARINE POLLUTANT
· **IATA**	ORGANIC PEROXIDE TYPE E, SOLID

· **14.3 Transport hazard class(es)**

· **ADR, IMDG**



· **Class**	5.2 Organic peroxides.
· **Label**	5.2

· **IATA**

· **Class**	5.2 Organic peroxides.
· **Label**	5.2

· **14.4 Packing group**

· **ADR, IMDG, IATA**	Void

· **14.5 Environmental hazards:**

· **Marine pollutant:**	Yes Symbol (fish and tree)
· **Special marking (ADR):**	Symbol (fish and tree)

· **14.6 Special precautions for user** Warning: Organic peroxides.

· **Danger code (Kemler):**	-
· **EMS Number:**	F-J,S-R

· **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)**	500 g
· **Transport category**	2
· **Tunnel restriction code**	D

· **UN "Model Regulation":** UN3108, ORGANIC PEROXIDE TYPE E, SOLID, ENVIRONMENTALLY HAZARDOUS, 5.2

SECTION 15: Regulatory information

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

· **National regulations:**

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **Other regulations, limitations and prohibitive regulations**
The data and the informations reported in the present Material Safety Data Sheet are consistent to the Directives 1967/548/EEC, 1999/45/EC, 76/769/EEC, to the Regulation 1907/2006/EC (REACH) and 1272/2008/CE (CLP) and to what prescribed by the in force regulation in matter of classification, packaging and labelling of dangerous substances and preparations. Finally, users should check and comply with specific national and local laws in matters of hazardous activities and environmental protection (e.g.: gassy, liquid and solid emissions) not specifically covered in this document. Compilation of Safety Data Sheet: Reg.UE n.453/2010 (amending Reg.EC n.1907/2006, Annex II)

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

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SECTION 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**
H241 Heating may cause a fire or explosion.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.
R36 Irritating to eyes.
R43 May cause sensitisation by skin contact.
R50 Very toxic to aquatic organisms.
R7 May cause fire.

· **Abbreviations and acronyms:**
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
CLP: Classification, Labelling and Packaging
TLV: Threshold Limit Value
TLV-TWA: Threshold Limit Value - Time Weighted Average
TLV-STEL: Threshold Limit Value - Short Term Exposure Limit
IOELV: Indicative Occupational Exposure Limit Value
BEI: Biological Exposure Indices
LD50: Lethal dose, 50 percent
LC50: Lethal Concentration, 50 percent
Kow: Octanol-Water partition coefficient
BCF: BioConcentration Factor
LC50: LC50: Lethal Concentration, 50 percent
EC50: Effective Concentration, 50 percent
ErC50: Effective Concentration, 50 percent, growth rate
WGK: Wassergefährdungsklasse - Water hazard class [Germany]
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
ACGIH: American Conference of Governmental Industrial Hygienists [USA]
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.**