



Safety Data Sheet according to (EC) No 1907/2006

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GELCOAT HARDENER 6G

sds no. : 205009
V004.0

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

1.1. Product identifier

GELCOAT HARDENER 6G

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

Intended use:
hardener component

1.3. Details of the supplier of the safety data sheet

Henkel Limited
2 Bishop Square Business Park
AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933
Fax-no.: +44 1606 863762

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (DPD):




O - Oxidizing
R7 May cause fire.
Xi - Irritant
R36 Irritating to eyes.
Sensitizing
R43 May cause sensitisation by skin contact.

N - Dangerous for the
environment

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements (DPD):

O - Oxidizing	Xi - Irritant	N - Dangerous for the environment
		

Risk phrases:

R7 May cause fire.
R36 Irritating to eyes.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S2 Keep out of the reach of children.
S3/7 Keep container tightly closed in a cool place.
S24 Avoid contact with skin.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water and soap.
S37 Wear suitable gloves.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains:

Dibenzoyl peroxide

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients**General chemical description:**

Hardener

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Dibenzoyl peroxide 94-36-0	202-327-6 01-2119511472-50	40- 60 %	Organic peroxides B H241 Serious eye irritation 2 H319 Acute hazards to the aquatic environment 1 H400 Skin sensitizer 1 H317
Oxydipropyl dibenzoate 27138-31-4	248-258-5	20- 30 %	Chronic hazards to the aquatic environment 2 H411

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

Declaration of ingredients according to DPD (EC) No 1999/45:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Dibenzoyl peroxide 94-36-0	202-327-6 01-2119511472-50	40 - 60 %	E - Explosive; R3 Xi - Irritant; R36 O - Oxidizing; R7 R43 N - Dangerous for the environment; R50
Oxydipropyl dibenzoate 27138-31-4	248-258-5	20 - 30 %	N - Dangerous for the environment; R51/53

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.
Substances without classification may have community workplace exposure limits available.

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

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Immediately wash skin thoroughly with soap and water.
Obtain medical attention if irritation persists.

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical advice.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.
Seek medical advice.

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

EYE: Irritation, conjunctivitis.

SKIN: Rash, Urticaria.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media:**

Carbon dioxide, foam, powder

5.2. Special hazards arising from the substance or mixture

Intensifies fire by releasing oxygen.
Oxides of carbon, oxides of nitrogen, irritating organic vapors.

5.3. Advice for firefighters

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition.
Ensure adequate ventilation.
Avoid skin and eye contact.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

For large spills absorb onto inert absorbent material and place in sealed container for disposal.
For small spills wipe up with paper towel and place in container for disposal.
Wash spillage site thoroughly with soap and water or detergent solution.
Dispose of contaminated material as waste according to Chapter 13.

6.4. Reference to other sections

See advice in chapter 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not inhale vapors and fumes.
Avoid skin and eye contact.
Keep away from sources of ignition - no smoking.
Use only in well-ventilated areas.
See advice in chapter 8
Avoid open flames and sources of ignition.
No smoking.

Hygiene measures:

Do not eat, drink or smoke while working.
Wash hands before work breaks and after finishing work.
Good industrial hygiene practices should be observed.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from sources of ignition.
Store in a cool, well-ventilated place.

7.3. Specific end use(s)

hardener component

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Valid for
Great Britain

Ingredient	ppm	mg/m ³	Type	Category	Remarks
DIBENZOYL PEROXIDE 94-36-0		5	Time Weighted Average (TWA):		EH40 WEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Dibenzoyl peroxide 94-36-0	aqua (marine water)					0,0602 µg/L	
Dibenzoyl peroxide 94-36-0	aqua (intermittent releases)					0,602 µg/L	
Dibenzoyl peroxide 94-36-0	STP					0,35 mg/L	
Dibenzoyl peroxide 94-36-0	sediment (freshwater)				0,338 mg/kg		
Dibenzoyl peroxide 94-36-0	soil				0,0758 mg/kg		
Dibenzoyl peroxide 94-36-0	oral					6,67 mg/kg food	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Dibenzoyl peroxide 94-36-0	worker	inhalation	Long term exposure - systemic effects		11,75 mg/m ³	
Dibenzoyl peroxide 94-36-0	worker	dermal	Long term exposure - systemic effects		6,6 mg/kg bw/day	
Dibenzoyl peroxide 94-36-0	general population	inhalation	Long term exposure - systemic effects		2,9 mg/m ³	
Dibenzoyl peroxide 94-36-0	general population	dermal	Long term exposure - systemic effects		3,3 mg/kg bw/day	
Dibenzoyl peroxide 94-36-0	general population	oral	Long term exposure - systemic effects		1,65 mg/kg bw/day	

Biological Exposure Indices:**8.2. Exposure controls:****Engineering controls:**

- Ensure good ventilation/extraction.
- Avoid naked flames, sparking and sources of ignition.

Respiratory protection:

- In case of insufficient ventilation, wear suitable respiratory equipment.
- Dust mask, P1 particle filter.

Hand protection:

- Chemical-resistant protective gloves (EN 374).
- Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
- Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
- This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Avoid eye contact.
Wear protective glasses.
The workplace should be equipped with an emergency shower and eye-rinsing facility.

Skin protection:
Suitable protective clothing

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	paste white
Odor	mild
pH	Not applicable
Initial boiling point	No data available / Not applicable
Flash point	> 50,0 °C (> 122 °F); Supplier method
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density (20 °C (68 °F))	1,2 g/cm ³
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Partially soluble
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with acids.
Alkali metals
Heavy metals.
Reducing agents.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Heat, flames, sparks and other sources of ignition.
Danger of decomposition if exposed to heat.

10.5. Incompatible materials

None if used properly.

10.6. Hazardous decomposition products

At higher temperatures toxic gases may be generated.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****General toxicological information:**

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Oral toxicity:

May cause irritation to the digestive tract.

Inhalative toxicity:

May cause irritation to respiratory system.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Irritating to eyes.

Sensitizing:

May cause sensitization by skin contact.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	LD50	3.914 mg/kg	oral	4 h	rat	OECD Guideline 401 (Acute Oral Toxicity)
	LC50	> 200 mg/l	inhalation		rat	OECD Guideline 402 (Acute Dermal Toxicity)
	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Dibenzoyl peroxide 94-36-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Oxydipropyl dibenzoate 27138-31-4	not sensitising		guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	negative negative negative	in vitro mammalian chromosome aberration test bacterial reverse mutation assay (e.g. Ames test) mammalian cell gene mutation assay	with and without with and without with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Oxydipropyl dibenzoate 27138-31-4	NOAEL=> 1000 mg/kg	oral: feed	90 days daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

SECTION 12: Ecological information**General ecological information:**

Do not empty into drains / surface water / ground water.

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Ecotoxicity:

Very toxic to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

Mobility:

No data available for the product.

Persistence and Biodegradability:

No data available for the product.

Bioaccumulative potential:

No data available for the product.

12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Dibenzoyl peroxide 94-36-0	LC50	0,06 mg/l	Fish	96 h	Daphnia magna	OECD Guideline 203 (Fish, Acute Toxicity Test)
Dibenzoyl peroxide 94-36-0	EC50	0,11 mg/l	Daphnia	48 h		OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Dibenzoyl peroxide 94-36-0	EC50	0,06 mg/l	Algae	72 h	Pimephales promelas	OECD Guideline 201 (Alga, Growth Inhibition Test)
Oxydipropyl dibenzoate 27138-31-4	LC50	3,7 mg/l	Fish	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)
Oxydipropyl dibenzoate 27138-31-4	EC50	19,3 mg/l	Daphnia	48 h		OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Oxydipropyl dibenzoate 27138-31-4	EC50	15 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Dibenzoyl peroxide 94-36-0	readily biodegradable		> 60 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Oxydipropyl dibenzoate 27138-31-4	readily biodegradable	aerobic	87 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Dibenzoyl peroxide 94-36-0	3,46	66,6		fish		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Dibenzoyl peroxide 94-36-0						
Oxydipropyl dibenzoate 27138-31-4	3,9					OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Product disposal:

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information**Road transport ADR:**

Class: 5.2
Packaging group:
Classification code: P1
Hazard ident. number:
UN no.: 3108
Label: 5.2
Technical name: ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
Tunnelcode: (D)
Additional substance property: Environmentally Hazardous

Railroad transport RID:

Class: 5.2
Packaging group:
Classification code: P1
Hazard ident. number:
UN no.: 3108
Label: 5.2
Technical name: ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
Tunnelcode:
Additional substance property: Environmentally Hazardous

Inland water transport ADN:

Class: 5.2
Packaging group:
Classification code: P1
Hazard ident. number:
UN no.: 3108
Label: 5.2
Technical name: ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
Additional substance property: Environmentally Hazardous

Marine transport IMDG:

Class: 5.2
Packaging group: II
UN no.: 3108
Label: 5.2
EmS: F-J ,S-R
Seawater pollutant: Marine pollutant
Proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE) (Dipropylenglycol dibenzoate)

Air transport IATA:

Class: 5.2
Packaging group: II
Packaging instructions (passenger)
Packaging instructions (cargo)
UN no.: 3108
Label: 5.2, HEAT
Proper shipping name: Organic peroxide type E, solid (Dibenzoyl peroxide)

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
VOC content 0 %
(1999/13/EC)

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

- 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.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R7 May cause fire.
- 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.
- H411 Toxic to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and its subsequent amendments, and Commission Directive 1999/45/EC.