

SDS SHEET

[In accordance with the regulation no 1907/2006 (Reach) and 453/210]

SECTION 1

Identification

Product identifier Gard-Deck ® Hardener (BPO)

Other means of identification Not determined

Recommended use: Coating

Manufacturer: Hydro-Gard, LLC

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Incident Spill, Leak, Fire,
Exposure, or Accident

CHEMTREC Day or Night
1-800-424-9300 / +1 703-527-3887 **CCN 825652**

SECTION 2

Hazard (s) Identification

Classification of substance or mixture Classification according to 1272/2008/EC
Org. Perox. D H242, Skin Sens 1 H317, Eye Irrit. 2 H319, Repr. 2 H361f, Aquatic Acute 1 H410.

Physical Hazards Heating may cause a fire.

Health Hazards May cause an allergic skin reaction. Causes serious eye irritation. Suspected of damaging fertility.

Environmental hazards Very toxic to aquatic life with long lasting effects.

Label elements



Signal Word Danger

Product Identifier Dibenzoylperoxid, Dicyclohexylphthalat

Hazard Statements:

H242 Heating may cause a fire.

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H360D May damage the unborn child

H410 Very toxic to aquatic life with long lasting effects

Precautionary statements

- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces - No Smoking
- P260 Do not breathe dust.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P308 + P313 If exposed or concerned: Get medical advice/attention
- P501 Dispose of contents and container according to local regulation.

Other hazards: The components of this mixture do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH.

SECTION 3 Composition / Information on Ingredients

Substances Not applicable

Mixtures Chemical characterization: Mixtures, Dibenzoylperoxid, Dicclohexlphthalat

Dangerous ingredients:

Chemical name	Classification acc to 1272/2008/	Identifier Codes	%
Dibenzoylperoxid	EC: Org. Perox. BH241, Eye Irrit. 2 H319, Skin Sens. 1 H317, Aquatic. Acute 1 H400, Aquatic Chronic 1 H410	CAS: 94-36-0 EINECS: 202-327-6 Index Number: 617-008-00-0 Reach number: 01-2119511472-50-XXXX	40-55%
Dicyclohexylphthalat	EC: Repr. 2 H361f, Skin Sens. 1 H317, Aquatic Chronic 3 H412	CAS: 84-61-7 EINECS: 201-545-9 Index Number: Reach Reg number: 01-2119978223-34-xxxx	40-55%

SECTION 4 First - Aid Measures

- General Information: Take off contaminated clothing immediately. Move the victim to fresh air.
- Inhalation: Consult a doctor if disturbing symptoms appear. Move the victim to fresh air. Keep victim warm and calm.
- Skin Contact: Wash the contaminated skin thoroughly with plenty of water. Take off contaminated clothing immediately. Consult a doctor if disturbing symptoms appear.
- Eye contact: Protect the non-irritated eye, remove contact lenses. Wash the contaminated eye with plenty of water for several minutes. Avoid powerful water stream-risk of cornea damage. Consult a doctor if disturbing symptoms appear.
- Ingestion: Do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a doctor immediately, show the container or label.
- Most important symptoms and effects, both acute and delayed: The product may trigger sensitization of the skin and respiratory tract. Treatment of acute eye/skin irritation or bronchial constriction is primarily symptomatic. Extended medical treatment may be required depending on the degree of exposure and the severity of the symptoms.
- Indication of any immediate medical attention and special treatment needed: Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

SECTION 5

Fire - Fighting Measures

Extinguishing media

Suitable extinguishing media:

Water spray, CO₂, sand, extinguishing powder.

Special hazards arising from the substance or mixture

During fire, the product may produce toxic fumes of carbon oxides, nitric oxides. Do not inhale combustion products, they can be dangerous for human health.

Advice for fire fighters

Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

SECTION 6

Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective measures. Ensure adequate ventilation. Avoid skin and eyes contamination. Do not breathe vapors. Keep away from sources of ignition.

Environmental precautions

Do not allow product to reach sewage system, water bodies or ground/soil. In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

Methods and material for containment and cleaning up

Stop leakage if possible. Eliminate all sources ignition, and do not generate flames or sparks. Do not flush with water or aqueous cleaning agents. Collect in a suitable container. Treat the collected material as waste. Clean the contaminated place and ventilate it.

Reference to other sections:

Appropriate conduct with waste product - Section 13. Personal protective equipment - see Section 8.

SECTION 7

Handling and Storage

Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Avoid contact with skin and eyes. Do not breathe vapors. Before break and after work wash hands. Use only in accordance with the identified purpose. Keep away from ignition sources. Do not eat, drink or smoke when using this product. Protect against electrostatic charges. Use only non-sparking tools. Ensure good interior ventilation, especially at floor level.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated area. Keep away from high temperatures and direct sunlight. Temperature recommended for storage: 41 °F - 77 °F (5 - 25 °C). Keep containers tightly sealed. Do not allow to dry out. Avoid contact with skin and eyes. Avoid incompatible materials.

Specific and use (s)

No information about other uses than those mentioned in Section 1

SECTION 8

Exposure Controls / Personal Protection

Control Parameters

Dibenzoylperoxid CAS 94-36-0		
AGW	5 mg/m ³	germany
Dicyclohexylphthalat CAS 84-61-7		
AGW	5 mg/m ³	germany
Legal basis: Commission Directive 2006/15/EC Please check any national occupational exposure limit values in your country		




DNEL and PNEC for Dibenzoylperoxid (CAS 94-36-0)

DNEL	ORAL	INHALATION	DERMAL
Workers, long-term, systemic effects		11,75 mg/m ³	6,6 mg/kg
Consumers, long-term, systemic effects	1,65 mg/cm ³	2,9 mg/m ³	3,3 mg/kg

Comment	PNEC	
PNEC Freshwater	0,000602 mg/l	
PNEC Seawater	0,0000602 mg/l	
PNEC Sediment	0,338 mg/kg	
PNEC Soil	6,67 mg/kg	

DNEL and PNEC for Dicyclohexylphthalat (CAS 84-61-7)

DNEL	ORAL	INHALATION	DERMAL
Workers, long-term, systemic effects		35,2 mg/m ³	0,5 mg/kg
Consumers, long-term, systemic effects	0,25 mg/cm ³	0,87 mg/m ³	0,25 mg/kg
Comment	PNEC		
PNEC Freshwater	0,00362 mg/l		
PNEC Seawater	0,000362 mg/l		
PNEC Sediment	0,106 mg/kg Dry weight		
PNEC Soil	0,21 mg/kg Dry weight		

Exposure Controls	Use the product in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Before break and after work wash hands carefully. Keep away from foodstuffs, beverages and food. Take off contaminated clothing immediately. Avoid contact with skin and eyes. Protective clothing should be stored separately.
Hand protection 	Only use chemical-protective gloves with CE-labeling of category III: Nitrile rubber, Butyl rubber. Recommended thickness of material: >= 0,5 mm The section 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. www.gisbau.de/service/epoxi/expotab.html
Eye protection 	Use tightly fitting protective glasses
Respiratory protection 	Recommended filter device for short term use; Combination filter A-P1

Body Protection	<u>Protective clothing necessary</u> Applied personal protective equipment must comply with requirements of the Directive 89/686/EC. The employer is obliged to provide protective equipment relevant to performed activities and in accordance with all quality requirements, including its maintenance and cleaning.
Environmental exposure controls	Do not allow large quantities of the product to contaminate ground water, canalization, sewages or soil.

SECTION 9 Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State:	Solid, free flowing powder
Color:	White
Odor	Not determined
Odor threshold	Not determined
pH:	Not determined
Melting point/freezing point:	Not determined (Decomposes)
Initial boiling point and boiling range:	Not determined
Flash point:	Not determined
Ignition Temperature:	Not determined
Evaporation Rate:	Not Applicable
Flammability (solid, gas)	Not Applicable
Upper/Lower Flammability or Explosive Limits	Not Applicable
Vapor Pressure (68°F (20°C))	Not Applicable
Vapor Density	Not Determined
Density (68°F (20°C))	1,23 g/cm ³
Solubility (ies)(water)	Insoluble
Solubility(ies): (organic solvents)	Not determined
Partition Coefficient: n-octanol/water:	Not Determined
Auto-Ignition Temperature:	Not Applicable
Decomposition Temperature:	Not Determined
Explosive Properties:	Product is not explosive
Oxidizing Properties:	Not Determined
Viscosity:dynamic (73.4°F (23°C))	Not Applicable
Other Information:	Peroxide content 48-55%

SECTION 10**Stability and Reactivity**

Reactivity	Do not allow to dry out, dry out may trigger explosion
Chemical stability	The product is stable under normal conditions of use and storage.
Possibility of hazardous reactions	Violent reactions with Monomers like Methyl Methacrylate
Condition to avoid	Avoid heat sources and direct exposure to sunlight.
Incompatible materials	Avoid contact with rust, iron and copper. Contact with incompatible materials such as acids, alkalies, heavy metals and reducing agent will result in hazardous decomposition. Do not mix with peroxide accelerators.
Hazardous decomposition products	In the event of fire: toxic gases and vapors, inflammable gases/vapors

SECTION 11**Toxicological Information**

Information on toxicological effects

Acute toxicity:

Dibenzoylperoxid, CAS 94-36-0			
Oral	LD ₅₀	>5000 mg/kg	(rat)
Inhalativ	LD ₅₀	>24300 mg/kg	(rat)
Dicycloexylphthalat, CAS 84-61-7			
Oral	LD ₅₀	>2000 mg/kg	(rat)
Dermal	LD ₅₀	>2000 mg/kg	(rat)

Toxicity of the product:

Acute Toxicity	ATEmix (oral) >2000 mg/kg. Based on available data, the classification criteria are not met.
Skin Corrosion/Irritation	Causes skin irritation.
Serious Eye Damage/Irritation	Causes serious eye irritation
Respiratory or skin Sensitization	May cause an allergic skin reaction
Germ Cell Mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Cause eye irritation
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration Danger	Based on available data, the classification criteria are not met.

SECTION 12**Ecological Information (non-mandatory)**

Toxicity

Aquatic toxicity:

Dibenzoylperoxid , CAS 94-36-0		
Algae toxicity	EC ₅₀ 0.06 mg/l/96h	
Daphnia toxicity	EC ₅₀ 0,11 mg/l/48h	
Fish toxicity	LC ₅₀ > 0.06 mg/l/96h	
Dicyclohexylphthalat, CAS 84-61-7		
Algae toxicity	EC ₅₀ 2 mg/l/96h	
Daphnia toxicity	EC ₅₀ 2 mg/l/96h	
Fish toxicity	LC ₅₀ 2 mg/l/96h	

Persistence and degradability Main content Dibenzoylperoxid is biodegradable

Bioaccumulative potential Dibenzoylperoxid: BCF 66,6

Mobility in soil No further relevant information available

Results of PBT and vPvB assessment Not applicable

Other adverse effects No further relevant information available.

SECTION 13**Disposal Consideration (non-mandatory)**

Waste treatment methods Disposal methods for the product: disposal in accordance with the local legislation. Store residues in original containers.

Disposal methods for used packing: Reuse/recycle/liquidate empty containers in accordance with the legislation in force. Only containers completely empty can be recycled.

Legal basis: Directive 2008/98/EC, 94/92/EC

European Waste catalogue:

08 00 00 Wastes FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS

08 02 00 wastes from MFSU of other coatings (including ceramic materials)

08 02 99 wastes not otherwise specified

SECTION 14**Transport Information (non-mandatory)**

UN Number

ADR, IMDG, IATA 3106

UN proper shipping name

ADR Organic Peroxide Type D, Solid

IMDG, IATA Organic Peroxide Type D, Solid

Transport hazard class(es)

ADR	5.2
IMDG, IATA	5.2

Packing Group

Environmental Hazards	Marine Pollutant: Yes
Special Precautions for User	EMS-Number: F-E,S-E
	Transport/Additional information: ADR
	Limited quantities (LQ): 5 L
	Tunnel restriction code: D

SECTION 15 Regulatory Information (non-mandatory)

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.

Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances.

Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labeling of dangerous preparations.

Commission Regulation (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labeling and packaging of substances and mixtures.

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

<u>Chemical safety assessment</u>	A Chemical Safety Assessment is not required for mixtures
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SECTION 16**Other Information, Including date of preparation or last revision**

This data is based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

H-phrases:

H242	Heating may cause a fire
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H361f	Suspected of damaging fertility
H410	Very toxic to aquatic life with long lasting effects

Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and toxic substance
vPvB	Very Persistent, very Bioaccumulative substance
ADR	Accord to European sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Rail)
RID	Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG	International Maritime Code for Dangerous Goods
IATA	International Air Transport Association
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
GefStoffV	Ordinance on Hazardous Substances, Germany
LC50	Lethal concentration, 50 percent
LD50	Lethal dose, 50 percent
Other Data	Classification was based on data on hazardous substances calculation method under the guidance of Regulation 1272/2008/EC (CLP).

The information and recommendations provided in this Safety Data Sheet are presented in good faith and believed to be correct as of the date hereof. The manufacturer makes no representations as to the completeness or accuracy thereof. Information supplied upon the condition that the persons receiving said information will make their own determination as to its suitability for their particular purpose prior to use. In no event will the manufacturer be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representation or warranties, either expressed or implied. Including the merchantability or fitness for a particular purpose are made herein with information contained herein is deemed to be reliable, conservative and accurate. Hydro-Gard, LLC reserves the right to change the design, specification or any other features at any time, without notice, while otherwise maintaining regulatory compliance.

End of Safety Data Sheet