



Safety Data Sheet

HEMPEL'S DIAMOND VARNISH 05149

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010 - Europe

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

1.1 Product identifier

Product name : HEMPEL'S DIAMOND VARNISH 05149
Product identity : 0514900000
Product type : polyurethane varnish (base for multi-component product)

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

Field of application : buildings and yacht. ships and shipyards.
Ready-for-use mixture : 05140 = 05149 2 vol. / 95370 1 vol.
Identified uses : Professional applications.

1.3 Details of the supplier of the safety data sheet

Company details : HEMPEL A/S
Lundtoftegårdsvej 91
DK-2800 Kgs. Lyngby
Denmark
Tel.: + 45 45 93 38 00
hempel@hempel.com
Date of issue : 8 May 2013
Date of previous issue : 14 January 2013.

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)
+45 45 93 38 00 (08.00 - 17.00)
See section 4 First aid measures.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

FLAMMABLE LIQUIDS - Category 3
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3

Classification according to Directive 1999/45/EC [DPD]

Classification : R10
R66, R67

See Section 16 for the full text of the R-phrases declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Warning
Hazard statements : Flammable liquid and vapor.
May cause drowsiness and dizziness.

Precautionary statements :

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.

Response : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage : Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : butyl acetate



SECTION 2: Hazards identification

Supplemental label elements : Contains alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-hydroxy-poly(oxyethylene); alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) and bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic reaction. Repeated exposure may cause skin dryness or cracking.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	25 - <35	R10 R66, R67	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	10 - <15	R10	Flam. Liq. 3, H226	[2]
cyclohexanone	EC: 203-631-1 CAS: 108-94-1 Index: 606-010-00-7	7 - <25	R10 Xn; R20	Flam. Liq. 3, H226 Acute Tox. 4, H332	[1] [2]
alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-hydroxy-poly(oxyethylene); alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	EC: 400-830-7 Index: 607-176-00-3	0.25 - <1	R43 N; R51/53	Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	EC: 255-437-1 CAS: 41556-26-7	<0.25	R43 N; R50/53 See Section 16 for the full text of the R-phrases declared above.	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit, see section 8.
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII



SECTION 4: First aid measures

4.1 Description of first aid measures

General :	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms persist, seek medical attention.
Inhalation :	Remove to fresh air. Keep person warm and at rest. If unconscious, place in recovery position and seek medical advice.
Skin contact :	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	<input checked="" type="checkbox"/> No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact :	No known significant effects or critical hazards.
Inhalation :	<input checked="" type="checkbox"/> Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
Skin contact :	Defatting to the skin. May cause skin dryness and irritation.
Ingestion :	<input checked="" type="checkbox"/> Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact :	No specific data.
Inhalation :	<input checked="" type="checkbox"/> Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact :	Adverse symptoms may include the following: irritation dryness cracking
Ingestion :	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO ₂ , powders, water spray. Not to be used: waterjet.
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5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides



SECTION 5: Firefighting measures

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations for flammable liquids. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters



**SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Exposure limit values
n-butyl acetate	ACGIH TLV (United States, 3/2012). STEL: 200 ppm 15 minutes. TWA: 150 ppm 8 hours. EU OEL (Europe, 12/2009). Absorbed through skin. STEL: 550 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 275 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. EU OEL (Europe, 12/2009). Absorbed through skin. STEL: 81.6 mg/m ³ 15 minutes. STEL: 20 ppm 15 minutes. TWA: 40.8 mg/m ³ 8 hours. TWA: 10 ppm 8 hours.
2-methoxy-1-methylethyl acetate	
cyclohexanone	

Recommended monitoring procedures

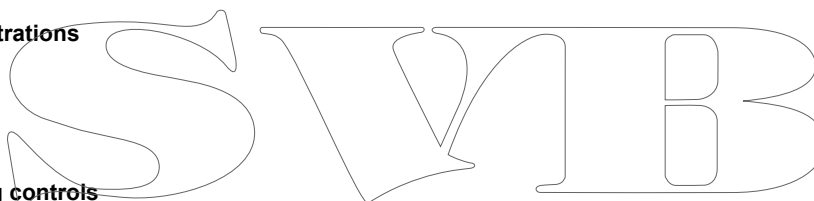
If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

**8.2 Exposure controls****Appropriate engineering controls**

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

General :

Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.



Hygiene measures :

Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Eye/face protection :

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Hand protection :

Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / 4H gloves, polyvinyl alcohol (PVA), Viton®
May be used: butyl rubber, nitrile rubber, neoprene rubber
Not recommended: natural rubber (latex), polyvinyl chloride (PVC)



SECTION 8: Exposure controls/personal protection

Body protection :	Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.
Respiratory protection :	If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state :	Liquid.
Odor :	Solvent-like
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	78°C This is based on data for the following ingredient: n-butyl acetate
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: 35°C (95°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and oxidizing materials.
Lower and upper explosive (flammable) limits :	1.1 - 9.4 vol %
Vapor pressure :	0.01 kPa This is based on data for the following ingredient: polyester polyol
Vapor density :	Testing not relevant or not possible due to nature of the product.
Relative density :	1.033 g/cm³
Solubility(ies) :	Partially soluble in the following materials: cold water and hot water.
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Lowest known value: 333°C (631.4°F) (2-methoxy-1-methylethyl acetate).
Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Testing not relevant or not possible due to nature of the product.
Explosive properties :	Slightly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.
Oxidizing properties :	Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight :	Weighted average: 52 %
Water % by weight :	Weighted average: 0 %
VOC content :	538.4 g/l
VOC content, Ready-for-use mixture :	449.9 g/l
TOC Content :	Weighted average: 336 g/l
Solvent Gas :	Weighted average: 0.111 m³/l



SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
butyl acetate	LC50 Inhalation Vapor	Rat	>21 mg/l	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	8532 mg/kg	-
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
	LD50 Dermal	Rabbit	1 mL/kg	-
	LD50 Oral	Rat	1800 mg/kg	-
	LDLo Oral	Rabbit	1600 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-hydroxy-poly(oxyethylene); alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	>2000 mg/kg	-

Acute toxicity estimates

**SECTION 11: Toxicological information**

Route	ATE value
Inhalation (gases)	96560 ppm

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
n-butyl acetate	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
	Eyes - Mild irritant	Rabbit	-	-
	Respiratory - Mild irritant	Rabbit	-	-
2-methoxy-1-methylethyl acetate	Respiratory - Mild irritant	Rabbit	-	-
	Eyes - Mild irritant	Rabbit	-	-
cyclohexanone	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms
	Skin - Mild irritant	Human	-	48 hours 50 Percent

Sensitizer

Product/ingredient name	Route of exposure	Species	Result
alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-hydroxy-poly(oxyethylene); alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene) bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	skin	Guinea pig	Sensitizing
	skin	Guinea pig	Sensitizing

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
n-butyl acetate	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
No known data available in our database.			

Aspiration hazard

Product/ingredient name	Result
No known data available in our database.	

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Sensitization : Contains alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-hydroxy-poly(oxyethylene); alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene), bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic reaction.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information**12.1 Toxicity**

Do not allow to enter drains or watercourses.

**SECTION 12: Ecological information**

Product/ingredient name	Result	Species	Exposure
butyl acetate	Acute EC50 674 mg/l	Algae	72 hours
2-methoxy-1-methylethyl acetate	Acute LC50 32000 µg/l Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
	Acute LC50 18000 - 19000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
cyclohexanone	Acute EC50 >1000 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 >500 mg/l	Daphnia - daphnia magna (vandloppe)	48 hours
	Acute LC50 >100 mg/l	Fish - Oryzias latipes (Orange-red killifish)	96 hours
	Acute EC50 32.9 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute LC50 527000 - 578000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic EC10 3.56 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-hydroxy-poly(oxyethylene); alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	Acute EC50 >9 mg/l	Algae	72 hours
	Acute LC50 4 mg/l	Daphnia	48 hours
	Acute LC50 2.8 mg/l	Fish	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
butyl acetate		90 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
butyl acetate	-		Readily
2-methoxy-1-methylethyl acetate	-		Readily
alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-hydroxy-poly(oxyethylene); alpha-3-[3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl]propionyl-1-omega-3-(3-(2H-benzotriazol-2-yl)-5-t-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	-		Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
butyl acetate	1.82	-	low
2-methoxy-1-methylethyl acetate	0.56	-	low
cyclohexanone	0.81	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : No known data available in our database.

Mobility : No known data available in our database.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.



SECTION 12: Ecological information

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible.

Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations.

Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.




European waste catalogue (EWC) : 08 01 11*

Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN1263	PAINT	3 	III	No.	Special provisions 640 (E) Tunnel code (D/E)
IMDG Class	UN1263	PAINT	3 	III	No.	Emergency schedules (EmS) F-E, S-E
IATA Class	UN1263	PAINT	3 	III	No.	-

PG* : Packing group

Env.* : Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

Seveso category This product is controlled under the Seveso II Directive.

Seveso category

P5c: Flammable liquids 2 and 3 not falling under P5a or P5b
C6: Flammable (R10)







SECTION 15: Regulatory information


15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Abbreviations and acronyms :	ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
Full text of abbreviated R phrases :	 R10- Flammable. R20- Harmful by inhalation. R43- May cause sensitization by skin contact. R66- Repeated exposure may cause skin dryness or cracking. R67- Vapors may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Full text of classifications [DSD/DPD] :	 Xn - Harmful N - Dangerous for the environment
Full text of abbreviated H statements :	 H226 Flammable liquid and vapor. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H336 May cause drowsiness and dizziness. 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.
Full text of classifications [CLP/GHS] :	 Acute Tox. 4, H332 ACUTE TOXICITY: INHALATION - Category 4 Aquatic Acute 1, H400 AQUATIC TOXICITY (ACUTE) - Category 1 Aquatic Chronic 1, H410 AQUATIC TOXICITY (CHRONIC) - Category 1 Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) - Category 2 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1 STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
 FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3	On basis of test data Calculation method

Notice to reader

 Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.