## SAFETY DATA SHEET

Date of issue/Date of revision : 1 February 2024 Version : 1.03



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

1.1 Product identifier

Product name : SIGMADUR 540 BASE RAL 2004

Product code : 00371629
Product type : Liquid.
Other means of : Not available.

identification

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

**Product use** : Professional applications, Used by spraying.

Use of the substance/

ood or the dube

: Coating.

mixture

Uses advised against : Product is not intended, labelled or packaged for consumer use.

#### 1.3 Details of the supplier of the safety data sheet

PPG Coatings Belgium BV/SRL Tweemontstraat 104 B-2100 Deurne Belgium Telephone +32-33606311

Telephone +32-33606311 Fax +32-33606435

e-mail address of person responsible for this SDS

: Product.Stewardship.EMEA@ppg.com

1.4 Emergency telephone number

**Supplier** 

+31 20 4075210

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Product definition : Mixture Classification according to UK CLP/GHS

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H336 Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

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

2.2 Label elements

Hazard pictograms







Signal word : Danger

English (GB) United Kingdom (UK) 1/19

SIGMADUR 540 BASE RAL 2004

## **SECTION 2: Hazards identification**

**Hazard statements** : Flammable liquid and vapour.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye damage. May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

**Prevention** : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot

surfaces, sparks, open flames and other ignition sources. No smoking. Avoid

release to the environment.

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER or doctor.

**Storage** : Not applicable.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

P280, P210, P273, P305 + P351 + P338, P310, P501

Supplemental label

elements

: Not applicable.

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

: Not applicable.

Special packaging requirements

**Containers to be fitted** 

with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

**Product meets the criteria** for PBT or vPvB according

to Regulation (EC) No. 1907/2006, Annex XIII

: This mixture does not contain any substances that are assessed to be a PBT or a

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
p-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
xylene	EC: 215-535-7 CAS: 1330-20-7	≥5.0 - ≤9.3	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
Hydrocarbons, C9, aromatics <	REACH #:	≥1.0 - ≤4.3	Flam. Liq. 3, H226	[1]

2/19 English (GB) **United Kingdom (UK)** 

SIGMADUR 540 BASE RAL 2004

## **SECTION 3: Composition/information on ingredients**

<b>SECTION 3: Compositio</b>	n/information on ing	redients		
0.1% cumene	01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6		STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≥1.0 - ≤4.1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1.0 - ≤5.0	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≥1.0 - ≤5.0	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Hydrocarbons, C9, aromatics > 0.1% cumene	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6	≤2.0	Flam. Liq. 3, H226 Carc. 1B, H350 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
Octadecanamide, N, N'-1,6-hexanediylbis[12-hydroxy-	CAS: 55349-01-4	<1.0	Skin Sens. 1, H317 Aquatic Chronic 4, H413	[1]
Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	REACH #: 01-2119491304-40 EC: 915-687-0 CAS: 1065336-91-5	≤1.0	Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
n-butyl acrylate	REACH #: 01-2119453155-43 EC: 205-480-7 CAS: 141-32-2 Index: 607-062-00-3	≤0.30	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335	[1] [2]
Hexanoic acid, 2-ethyl-, zinc salt, basic	REACH #: 01-2119979093-30 EC: 286-272-3 CAS: 85203-81-2 Index: 607-230-00-6	<0.30	Eye Irrit. 2, H319 Repr. 1B, H360D Aquatic Chronic 3, H412	[1]
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤0.30	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 See Section 16 for the full text of the H	[1] [2]
			statements declared above.	

SIGMADUR 540 BASE RAL 2004

## **SECTION 3: Composition/information on ingredients**

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Xylene: Several REACH registrations cover the REACH registered substance with xylene isomers, ethylbenzene (and toluene). The other REACH Registrations include: 01-2119555267-33 reaction mass of ethylbenzene and m-xylene and p-xylene, 01-2119486136-34 Aromatic hydrocarbons, C8, 01-2119539452-40 reaction mass of ethylbenzene and xylene.

#### **Type**

Inhalation

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

## **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

**Eye contact**: Check for and remove any contact lenses. Immediately flush eyes with running water for

at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained

personnel.

**Skin contact**: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water

or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep

person warm and at rest. Do NOT induce vomiting.

**Protection of first-aiders** : 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. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

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

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

**Skin contact**: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

**Ingestion**: Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

pain watering redness

**Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

**Ingestion**: Adverse symptoms may include the following:

stomach pains

English (GB) United Kingdom (UK) 4/19

SIGMADUR 540 BASE RAL 2004

## **SECTION 4: First aid measures**

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

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media

Use dry chemical, CO<sub>2</sub> water spray (fog) or foam.

**Unsuitable extinguishing** 

media

: Do not use water jet.

#### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous combustion** products

: Decomposition products may include the following materials:

carbon oxides nitrogen oxides sulfur oxides

halogenated compounds metal oxide/oxides

#### 5.3 Advice for firefighters

**Special protective actions** for fire-fighters

: 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective** equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure

## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## **6.2 Environmental** precautions

: Avoid dispersal of spilt 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). Water polluting material. May be harmful to the environment if released in large quantities.

#### 6.3 Methods and material for containment and cleaning up

5/19 English (GB) United Kingdom (UK)

SIGMADUR 540 BASE RAL 2004

## **SECTION 6: Accidental release measures**

#### **Small spill**

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 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**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 7.1 Precautions for safe handling

## **Protective measures**

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

#### 7.3 Specific end use(s)

See Section 1.2 for Identified uses.

English (GB) United Kingdom (UK) 6/19

SIGMADUR 540 BASE RAL 2004

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

## 8.1 Control parameters

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

## **Occupational exposure limits**

Product/ingredient name	Exposure limit values
<mark>ਯ-</mark> butyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020).
•	STEL: 966 mg/m³ 15 minutes.
	STEL: 200 ppm 15 minutes.
	TWA: 724 mg/m³ 8 hours.
	TWA: 150 ppm 8 hours.
xylene	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-,p-
	or mixed isomers] Absorbed through skin.
	STEL: 441 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 220 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
2-methylpropan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	STEL: 231 mg/m <sup>3</sup> 15 minutes.
	STEL: 75 ppm 15 minutes.
	TWA: 154 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 552 mg/m³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 441 mg/m³ 8 hours.
	TWA: 100 ppm 8 hours.
2-methoxy-1-methylethyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 548 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 274 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.
n-butyl acrylate	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	STEL: 26 mg/m³ 15 minutes.
	STEL: 5 ppm 15 minutes.
	TWA: 5 mg/m³ 8 hours.
	TWA: 1 ppm 8 hours.
toluene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 384 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 191 mg/m³ 8 hours.
	TWA: 50 ppm 8 hours.

## **Biological exposure indices**

Product/ingredient name	Exposure indices
<b>x</b> ylene	XYLENES

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

## **DNELs/DMELs**

English (GB) United Kingdom (UK) 7/19

**SIGMADUR 540 BASE RAL 2004** 

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

SECTION 6. Exposure controls/personal protection					
Product/ingredient name	Type	Exposure	Value	Population	Effects
n-butyl acetate	DNEL	Long term Inhalation	300 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	11 mg/m³	Workers	Systemic
	DNEL	Long term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	7 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	12 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	35.7 mg/m <sup>3</sup>	General population	Local
	DNEL DNEL	Long term Inhalation Short term Inhalation	48 mg/m³ 300 mg/m³	Workers General population	Systemic Local
	DNEL	Short term Inhalation	300 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	300 mg/m³	Workers	Local
	DNEL	Short term Inhalation	600 mg/m³	Workers	Local
	DNEL	Short term Inhalation	600 mg/m³	Workers	Systemic
xylene	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
Aylerie	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	65.3 mg/m³	General population	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	221 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	260 mg/m³	General population	Local
	DNEL	Short term Inhalation	260 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	442 mg/m³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m³	Workers	Systemic
Hydrocarbons, C9, aromatics < 0.1% cumene	DNEL	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	150 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	11 mg/kg	General population	Systemic
	DNEL	Long term Oral	11 mg/kg	General population	Systemic
	DNEL	Long term Inhalation	32 mg/m³	General population	Systemic
2-methylpropan-1-ol	DNEL	Long term Inhalation	55 mg/m³	General population	Local
	DNEL	Long term Inhalation	310 mg/m³	Workers	Local
ethylbenzene	DMEL	Long term Inhalation	442 mg/m³	Workers	Local
	DMEL	Short term Inhalation	884 mg/m³	Workers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	15 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	293 mg/m³	Workers	Local
2-methoxy-1-methylethyl acetate	DNEL	Long term Inhalation	33 mg/m³	General population	Local
	DNEL	Long term Inhalation	33 mg/m³	General population	Systemic
	DNEL	Long term Oral	36 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	275 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	320 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	550 mg/m³	Workers	Local
Hydrocarbons, C9, aromatics > 0.1% cumene	DNEL DNEL	Long term Dermal Long term Inhalation	796 mg/kg bw/day 150 mg/m³	Workers Workers	Systemic Systemic
- 0.170 Culliene	DNEL	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	32 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	11 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	11 mg/kg bw/day	General population	Systemic
n-butyl acrylate	DNEL	Long term Inhalation	11 mg/m <sup>3</sup>	Workers	Local
Hexanoic acid, 2-ethyl-, zinc salt, basic	DNEL	Long term Oral	3.21 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.21 mg/kg bw/day	General population	Systemic

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**SIGMADUR 540 BASE RAL 2004** 

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

	DNEL	Long term Dermal	6.41 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	10.42 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	20.83 mg/m <sup>3</sup>	Workers	Systemic
toluene	DNEL	Long term Oral	8.13 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	56.5 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	56.5 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	192 mg/m³	Workers	Local
	DNEL	Long term Inhalation	192 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	226 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	226 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	226 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	384 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	384 mg/m³	Workers	Local
	DNEL	Short term Inhalation	384 mg/m³	Workers	Systemic
	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Inhalation Long term Inhalation Long term Dermal Short term Inhalation Short term Inhalation Long term Dermal Short term Inhalation	56.5 mg/m³ 192 mg/m³ 192 mg/m³ 226 mg/kg bw/day 226 mg/m³ 226 mg/m³ 384 mg/kg bw/day 384 mg/m³	General population Workers Workers General population General population General population Workers Workers	Systemic Local Systemic Systemic Local Systemic Systemic Systemic Local

## **PNECs**

Marine water   0.018 mg/l   0.981 mg/kg	Product/ingredient name	Compartment Detail	Value	Method Detail
Fresh water sediment Marine water sediment Sewage Treatment Plant Soil	n-butyl acetate	Fresh water	0.18 mg/l	-
Marine water sediment   Sewage Treatment Plant   Soil   Sewage Treatment Plant   Fresh water sediment   Marine water sediment   Soil   Sewage Treatment Plant   Fresh water sediment   Marine water sediment   Marine water sediment   Sewage Treatment Plant   Fresh water sediment   Marine water sediment   Marine water sediment   Marine water sediment   Soil   Sewage Treatment Plant   Fresh water   Sewage Treatment Plant   Soil   Sewage Treatment Plant   Fresh water   Sewage Treatment Plant   Fresh water   Sewage Treatment Plant   Fresh water sediment   Soil   Secondary Poisoning   Secondary Poisoning   Secondary Poisoning   Secondary Poisoning   Secondary Poisoning   Secondary Poisoning   Sewage Treatment Plant   Marine water   Soil   Sewage Treatment Plant   Sensitivity Distribution   Sensitivity Dis		Marine water		-
Sewage Treatment Plant   Soil		Fresh water sediment	0.981 mg/kg	-
Soil		Marine water sediment	0.0981 mg/kg	-
Fresh water		Sewage Treatment Plant	35.6 mg/l	-
Marine water   Sewage Treatment Plant   Fresh water sediment   Marine water sediment   Marine water sediment   Marine water sediment   Soil   2.31 mg/kg   -		Soil	0.0903 mg/kg	-
Sewage Treatment Plant Fresh water sediment Soil 2-methylpropan-1-ol Fresh water Sewage Treatment Plant Fresh water sediment Soil 2-methylpropan-1-ol Fresh water Sewage Treatment Plant Fresh water Sewage Treatment Plant Fresh water sediment Soil Ethylbenzene Fresh water Sewage Treatment Plant Fresh water sediment Marine water Soil Ethylbenzene Fresh water Soil Fresh water sediment Soil Secondary Poisoning Presh water Soil Secondary Poisoning Fresh water Soil Sewage Treatment Plant Fresh water sediment Soil Secondary Poisoning Secondary Poisoning Fresh water Marine water sediment Marine water sediment Marine water sediment Marine water sediment Soil Secondary Poisoning Secondary Poisoning Secondary Poisoning Fresh water Fresh water sediment Marine water sediment Marine water sediment Marine water sediment Soil Secondary Poisoning Fresh water sediment Marine water sediment Marine water sediment Soil Sewage Treatment Plant Fresh water Sewage Treatment	xylene	Fresh water	0.327 mg/l	-
Fresh water sediment Marine water sediment Soil 2.31 mg/kg		Marine water	0.327 mg/l	-
Assessment Factors  2-methylpropan-1-ol  Presh water Marine water sediment Soil  2-methylpropan-1-ol  Presh water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil  ethylbenzene  Presh water Ondrine water Soil  ethylbenzene  Presh water Marine water Soil  ethylbenzene  Presh water Marine water Soil  Sewage Treatment Plant Fresh water Marine water sediment Narine water sediment Soil  Secondary Poisoning Presh water Secondary Poisoning Presh water Marine water Soil  Secondary Poisoning Presh water Marine water Soil  Sewage Treatment Soil  Sewage Treatment Marine water Marine water Marine water Soil  Sewage Treatment Marine water Soil  Sewage Treatment Marine water Soil  Sewage Treatment Plant Fresh water  Ones mg/kg  -  12.46 mg/kg dwt 2.31 mg/kg Assessment Factors Assessment Fac		Sewage Treatment Plant	6.58 mg/l	-
2-methylpropan-1-ol  Presh water Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil  ethylbenzene  Presh water Marine water sediment Marine water sediment Soil  ethylbenzene  Presh water Marine water Sewage Treatment Plant Fresh water Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Marine water sediment Soil  2.31 mg/kg Assessment Factors 0.01 mg/l Assessment Factors Assessment Factors 9.6 mg/l 1.37 mg/kg dwt 1.37 mg/kg dwt 1.37 mg/kg dwt Marine water sediment Soil Secondary Poisoning Presh water Marine water Marine water Marine water Marine water Soil Sewage Treatment Plant Marine water sediment Marine wat		Fresh water sediment	12.46 mg/kg dwt	-
2-methylpropan-1-ol  Fresh water Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil  ethylbenzene  Fresh water Marine water Sewage Treatment Plant Soil  ethylbenzene  Fresh water Marine water Sewage Treatment Plant Fresh water Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil Secondary Poisoning Secondary Poisoning Presh water Marine water Soil Secondary Poisoning Secondary Po		Marine water sediment	12.46 mg/kg dwt	-
Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil  ethylbenzene  Fresh water Marine water Sewage Treatment Plant Soil  Ethylbenzene  Fresh water Marine water Sewage Treatment Plant Fresh water Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Marine water sediment Marine water sediment Soil Secondary Poisoning Presh water Marine water Sewage Treatment Marine water sediment Marine water sediment Soil Secondary Poisoning Presh water Marine water Marine water Marine water Sewage Treatment Marine water sediment Marine water  0.635 mg/l  -  0.29 mg/kg		Soil	2.31 mg/kg	-
Sewage Treatment Plant Fresh water sediment Narine water sediment Soil 0.076 mg/kg dwt O.156 mg/kg O.29 mg/	2-methylpropan-1-ol	Fresh water	0.4 mg/l	Assessment Factors
Fresh water sediment Narine water sediment Soil		Marine water	0.04 mg/l	Assessment Factors
Marine water sediment Soil		Sewage Treatment Plant	10 mg/l	Assessment Factors
ethylbenzene  Soil Fresh water Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil Secondary Poisoning 2-methoxy-1-methylethyl acetate  Fresh water Marine water sediment Marine water Soil Secondary Poisoning Fresh water Marine water Soil Secondary Poisoning Fresh water Marine water Fresh water Marine water Soil Sewage Treatment Plant Fresh water Marine water Soil Sewage Treatment Marine water sediment Marine water sediment Soil Sewage Treatment Plant Fresh water  Semage Treatment Pl		Fresh water sediment	1.56 mg/kg dwt	Equilibrium Partitioning
ethylbenzene  Fresh water Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil Secondary Poisoning Presh water Marine water Secondary Poisoning Presh water Marine water Secondary Poisoning Presh water Marine water  Secondary Poisoning Presh water Marine water Marine water Marine water Marine water Marine water Soil Sewage Treatment Plant Soil Sewage Treatment Plant Toluene  Fresh water  O.1 mg/l Assessment Factors A		Marine water sediment	0.156 mg/kg dwt	-
ethylbenzene  Fresh water Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil Secondary Poisoning Presh water Marine water Secondary Poisoning Presh water Marine water Secondary Poisoning Presh water Marine water  Secondary Poisoning Presh water Marine water Marine water Marine water Marine water Marine water Soil Sewage Treatment Plant Soil Sewage Treatment Plant Toluene  Fresh water  O.1 mg/l Assessment Factors A		Soil	0.076 mg/kg dwt	Equilibrium Partitioning
Sewage Treatment Plant Fresh water sediment Marine water sediment Soil Secondary Poisoning Presh water Secondary Poisoning Sec	ethylbenzene	Fresh water		Assessment Factors
Fresh water sediment Marine water sediment Soil 2.68 mg/kg dwt Secondary Poisoning Secondary Poisoning 20 mg/kg - Presh water Sediment Marine water Sediment Secondary Poisoning Secondary		Marine water	0.01 mg/l	Assessment Factors
Marine water sediment Soil 2.68 mg/kg dwt Secondary Poisoning 20 mg/kg - 2-methoxy-1-methylethyl acetate  Presh water 0.635 mg/l - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -		Sewage Treatment Plant	9.6 mg/l	Assessment Factors
Soil Secondary Poisoning 20 mg/kg dwt 2-methoxy-1-methylethyl acetate Fresh water 0.635 mg/l - Marine water 90.635 mg/l - Fresh water sediment Marine water sediment Soil 0.29 mg/kg - 0.29		Fresh water sediment	13.7 mg/kg dwt	Equilibrium Partitioning
Secondary Poisoning 20 mg/kg - 2-methoxy-1-methylethyl acetate  Fresh water 0.635 mg/l - Marine water 0.0635 mg/l - Fresh water sediment 3.29 mg/kg - Marine water sediment 0.329 mg/kg - Soil 0.29 mg/kg - Sewage Treatment Plant 100 mg/l - toluene  Fresh water 0.68 mg/l Sensitivity Distribution		Marine water sediment	1.37 mg/kg dwt	Equilibrium Partitioning
2-methoxy-1-methylethyl acetate         Fresh water Marine water Sediment Soil Sewage Treatment Plant toluene         0.635 mg/l O.0635 mg/l O.06		Soil	2.68 mg/kg dwt	Equilibrium Partitioning
Marine water		Secondary Poisoning	20 mg/kg	-
Fresh water sediment Marine water sediment Soil Sewage Treatment Plant toluene S.29 mg/kg - 0.329 mg/kg - 0.29 mg/kg - 100 mg/l - 100 mg/l Sensitivity Distribution	2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l	-
Marine water sediment Soil 0.329 mg/kg - 0.29 mg/kg - 0.29 mg/kg Sewage Treatment Plant toluene		Marine water	0.0635 mg/l	-
Soil 0.29 mg/kg - Sewage Treatment Plant toluene		Fresh water sediment	3.29 mg/kg	-
Sewage Treatment Plant toluene Sewage Treatment Plant 0.68 mg/l - Sensitivity Distribution		Marine water sediment	0.329 mg/kg	-
toluene Fresh water 0.68 mg/l Sensitivity Distribution		Soil	0.29 mg/kg	-
toluene Fresh water 0.68 mg/l Sensitivity Distribution		Sewage Treatment Plant	100 mg/l	-
	toluene	_		Sensitivity Distribution
		Marine water		
Sewage Treatment Plant   13.61 mg/l   Sensitivity Distribution		Sewage Treatment Plant		
Fresh water sediment 16.39 mg/kg dwt Equilibrium Partitioning				
Marine water sediment   16.39 mg/kg dwt   -		Marine water sediment		-

## **8.2 Exposure controls**

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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

#### **Individual protection measures**

**Hygiene measures** 

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection **Skin protection** 

: Chemical splash goggles and face shield.

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Gloves** 

: For prolonged or repeated handling, use the following type of gloves:

Recommended: neoprene, natural rubber (latex), polyvinyl alcohol (PVA), Viton®, butyl

rubber

May be used: Chloroprene, nitrile rubber

**Body protection** 

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Wear a respirator conforming to EN140. Filter type: organic vapour (Type A) and particulate filter P3

**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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### 9.1 Information on basic physical and chemical properties

#### **Appearance**

Physical state : Liquid.
Colour : Orange.
Odour : Characteristic.
Odour threshold : Not available.

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## **SECTION 9: Physical and chemical properties**

**Melting point/freezing point**: May start to solidify at the following temperature: 21.9°C (71.4°F) This is based on

data for the following ingredient: dimethyl succinate. Weighted average: -81.57°C

(-114.8°F)

Initial boiling point and

boiling range

: >37.78°C (>100°F)

Flammability (solid, gas)

Upper/lower flammability or

explosive limits

: Greatest known range: Lower: 1.7% Upper: 10.9% (2-methylpropan-1-ol)

Flash point : Closed cup: 28°C (82.4°F)

**Auto-ignition temperature** :

Ingredient name	°C	°F	Method
ydrocarbons, C9, aromatics < 0.1% cumene	280 to 470	536 to 878	

pH : Not applicable.

Not applicable. insoluble in water.

Viscosity : Kinematic (40°C): >21 mm<sup>2</sup>/s

Solubility(ies) :

Media	Result
cold water	Not soluble

Miscible with water : No.

Partition coefficient: n-octanol/ : Not applicable.

water

Vapour pressure :

	Vapour Pressure at 20°C			Vap	our pressui	re at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
p-butyl acetate	11.25096	1.5	DIN EN 13016-2			

Relative density : 1.26

**Vapour density** : Highest known value: 4.6 (Air = 1) (2-methoxy-1-methylethyl acetate). Weighted

average: 3.75 (Air = 1)

**Explosive properties** : The product itself is not explosive, but the formation of an explosible mixture of

vapour or dust with air is possible.

Oxidising properties

Particle characteristics

: Product does not present an oxidizing hazard.

Median particle size : Not applicable.

## 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** : When exposed to high temperatures may produce hazardous decomposition products.

Refer to protective measures listed in sections 7 and 8.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidising agents, strong alkalis, strong acids.

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## **SECTION 10: Stability and reactivity**

10.6 Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

## **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
<mark>ଜ</mark> -butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
-	LC50 Inhalation Vapour	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	_
	LD50 Oral	Rat	10.768 g/kg	_
xylene	LD50 Dermal	Rabbit	1.7 g/kg	_
	LD50 Oral	Rat	4.3 g/kg	_
Hydrocarbons, C9,	LD50 Dermal	Rabbit - Male,	>2000 mg/kg	_
aromatics < 0.1% cumene		Female	3. 3	
	LD50 Oral	Rat	8400 mg/kg	_
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	24.6 mg/l	4 hours
,,,,,,	LD50 Dermal	Rabbit	2460 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	_
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
outy is on 2 on o	LD50 Dermal	Rabbit	17.8 g/kg	_
	LD50 Oral	Rat	3.5 g/kg	_
2-methoxy-1-methylethyl	LC50 Inhalation Vapour	Rat	30 mg/l	4 hours
acetate	LC30 IIIIIalation Vapoui	ιλαι	30 mg/i	4 110013
acetate	LD50 Dermal	Rabbit	>5 g/kg	
	LD50 Oral	Rat	6190 mg/kg	_
Hydrocarbona CO	LD50 Oral	Rabbit		_
Hydrocarbons, C9, aromatics > 0.1% cumene	LD50 Definal	Rappit	>3160 mg/kg	-
aromatics > 0.1% cumene	I DE0 O1	Det Female	2400 //	
Described and the second second	LD50 Oral	Rat - Female	3492 mg/kg	-
Reaction mass of bis	LD50 Dermal	Rat	>3170 mg/kg	-
(1,2,2,6,6-pentamethyl-				
4-piperidyl) sebacate and				
methyl				
1,2,2,6,6-pentamethyl-				
4-piperidyl sebacate				
	LD50 Oral	Rat - Male, Female	3230 mg/kg	-
n-butyl acrylate	LC50 Inhalation Gas.	Rat	2730 ppm	4 hours
	LC50 Inhalation Vapour	Rat	1970 ppm	4 hours
	LD50 Dermal	Rabbit	2 g/kg	-
	LD50 Oral	Rat	900 mg/kg	_
toluene	LC50 Inhalation Vapour	Rat	49 g/m³	4 hours
10.400	LD50 Dermal	Rabbit	8.39 g/kg	_
	LD50 Oral	Rat	5580 mg/kg	
	LD30 Olai	livar	Jood mg/kg	1-

## Conclusion/Summary Acute toxicity estimates

: There are no data available on the mixture itself.

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
SIGMADUR 540 BASE RAL 2004	N/A	20685.3	N/A	116.2	N/A
n-butyl acetate	10768	N/A	N/A	N/A	N/A
xylene	4300	1700	N/A	11	N/A
Hydrocarbons, C9, aromatics < 0.1% cumene	8400	N/A	N/A	N/A	N/A
2-methylpropan-1-ol	2830	2460	N/A	24.6	N/A
ethylbenzene	3500	17800	N/A	17.8	N/A
2-methoxy-1-methylethyl acetate	6190	N/A	N/A	30	N/A
Hydrocarbons, C9, aromatics > 0.1% cumene	3492	N/A	N/A	N/A	N/A

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**SIGMADUR 540 BASE RAL 2004** 

## **SECTION 11: Toxicological information**

eaction mass of bis(1,2,2,6,6-pentamethyl-	3230	N/A	N/A	N/A	N/A
-piperidyl) sebacate and methyl					
,2,2,6,6-pentamethyl-4-piperidyl sebacate					
luene	5580	8390	N/A	49	N/A

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Kylene Skin - Moderate irritant		Rabbit	-	24 hours 500	-
				mg	

**Conclusion/Summary**: Not available.

Skin
 There are no data available on the mixture itself.
 Eyes
 There are no data available on the mixture itself.
 Respiratory
 There are no data available on the mixture itself.

**Sensitisation** 

**Conclusion/Summary** 

Skin: There are no data available on the mixture itself.Respiratory: There are no data available on the mixture itself.

**Mutagenicity** 

Conclusion/Summary

: There are no data available on the mixture itself.

**Carcinogenicity** 

Conclusion/Summary

: There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary

<u>Teratogenicity</u>

: There are no data available on the mixture itself.

Conclusion/Summary

: There are no data available on the mixture itself.

#### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
n-butyl acetate	Category 3	-	Narcotic effects
xylene	Category 3	-	Respiratory tract irritation
Hydrocarbons, C9, aromatics < 0.1% cumene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
Hydrocarbons, C9, aromatics > 0.1% cumene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
n-butyl acrylate	Category 3	-	Respiratory tract irritation
toluene	Category 3	-	Narcotic effects

## Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs
toluene	Category 2	-	-

#### **Aspiration hazard**

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**SIGMADUR 540 BASE RAL 2004** 

## **SECTION 11: Toxicological information**

Product/ingredient name	Result
Hydrocarbons, C9, aromatics < 0.1% cumene ethylbenzene Hydrocarbons, C9, aromatics > 0.1% cumene toluene	ASPIRATION HAZARD - Category 1

Information on likely routes : Not available.

of exposure

Potential acute health effects

**Eye contact** : Causes serious eye damage.

: Can cause central nervous system (CNS) depression. May cause drowsiness or Inhalation

dizziness.

Skin contact : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

: Adverse symptoms may include the following: Eye contact

> pain watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact** : Adverse symptoms may include the following:

> pain or irritation redness

dryness cracking

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

**Potential immediate** 

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

**Potential immediate** : Not available.

effects

**Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/

or dermatitis. Once sensitized, a severe allergic reaction may occur when

subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards.

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## **SECTION 11: Toxicological information**

**Reproductive toxicity**: No known significant effects or critical hazards.

Other information : Not available.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<mark>ଜ-</mark> butyl acetate	Acute LC50 18 mg/l	Fish	96 hours
Hydrocarbons, C9, aromatics < 0.1% cumene	LC50 9.2 mg/l	Fish	96 hours
2-methylpropan-1-ol	Acute EC50 1100 mg/l	Daphnia	48 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
2-methoxy-1-methylethyl acetate	Acute LC50 134 mg/l Fresh water	Fish - Trout - Oncorhynchus mykiss	96 hours
Hydrocarbons, C9, aromatics > 0.1% cumene	EC50 3.2 mg/l	Daphnia	48 hours
	LC50 9.2 mg/l	Fish	96 hours
Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	EC50 1.68 mg/l	Algae	72 hours
	LC50 0.9 mg/l	Fish	96 hours

**Conclusion/Summary**: Not available.

## 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
n-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28 days	-	-
Hydrocarbons, C9, aromatics < 0.1% cumene	-	78 % - 28 days	_	-
ethylbenzene	-	79 % - Readily - 10 days	-	-
2-methoxy-1-methylethyl acetate	-	83 % - Readily - 28 days	-	-
Hydrocarbons, C9, aromatics > 0.1% cumene	-	75 % - Readily - 28 days	-	-

## **Conclusion/Summary**: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<mark>ଜ-</mark> butyl acetate	-	-	Readily
xylene	-	-	Readily
Hydrocarbons, C9,	-	-	Readily
aromatics < 0.1% cumene			-
ethylbenzene	-	-	Readily
2-methoxy-1-methylethyl	-	-	Readily
acetate			-
Hydrocarbons, C9,	-	-	Readily
aromatics > 0.1% cumene			
toluene	-	-	Readily

## 12.3 Bioaccumulative potential

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SIGMADUR 540 BASE RAL 2004

## **SECTION 12: Ecological information**

Product/ingredient name	LogPow	BCF	Potential
<mark>⊮-</mark> butyl acetate	2.3	-	Low
xylene	3.12	7.4 to 18.5	Low
Hydrocarbons, C9,	3.7 to 4.5	10 to 2500	High
aromatics < 0.1% cumene			
2-methylpropan-1-ol	1	-	Low
ethylbenzene	3.6	79.43	Low
2-methoxy-1-methylethyl	1.2	-	Low
acetate			
n-butyl acrylate	2.38	-	Low
toluene	2.73	8.32	Low

#### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

#### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

#### **Product**

**Methods of disposal** 

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

## Hazardous waste

: Yes.

#### Waste catalogue

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

#### **Packaging**

**Methods of disposal** 

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

Type of packaging	Waste catalogue		
Container	15 01 06	mixed packaging	

## **Special precautions**

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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SIGMADUR 540 BASE RAL 2004

## **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	Yes.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

#### **Additional information**

ADR/RID : None identified.

**Tunnel code** : (D/E)

: The product is only regulated as an environmentally hazardous substance when transported in tank **ADN** 

vessels.

**IMDG** : None identified. : None identified. IATA

user

14.6 Special precautions for : 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 IMO

instruments

: Not available.

## **SECTION 15: Regulatory information**

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **UK (GB)/REACH**

Annex XIV - List of substances subject to authorisation

**Annex XIV** 

None of the components are listed.

**Substances of very high concern** 

None of the components are listed.

Ozone depleting substances

Not listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

#### **Seveso Directive**

This product is controlled under the Seveso Directive.

**Danger criteria** 

17/19 **United Kingdom (UK)** English (GB)

**SIGMADUR 540 BASE RAL 2004** 

## **SECTION 15: Regulatory information**

**Category** 

P5c

## **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

#### Procedure used to derive the classification

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

## **Full text of abbreviated H statements**

<b>⊮</b> 225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful 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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H360D	May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

#### **Full text of classifications**

English (GB) United Kingdom (UK) 18/19

SIGMADUR 540 BASE RAL 2004

## **SECTION 16: Other information**

Acute Tox. 4
Aquatic Acute 1
Aquatic Chronic 1
Aquatic Chronic 2
Aquatic Chronic 3
Aquatic Chronic 3
Aquatic Chronic 4
Aquatic Chronic 4
ACUTE TOXICITY - Category 4
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4

Asp. Tox. 1 ASPIRATION HAZARD - Category 1 Carc. 1B CARCINOGENICITY - Category 1B

Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2

Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3
Repr. 1B REPRODUCTIVE TOXICITY - Category 1B
Repr. 2 REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1 SKIN SENSITISATION - Category 1
Skin Sens. 1A SKIN SENSITISATION - Category 1A

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

#### **History**

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revision

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Prepared by : EHS Version : 1.03

#### **Disclaimer**

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English (GB) United Kingdom (UK) 19/19