SAFETY DATA SHEET

Date of issue/Date of revision

: 13 December 2024 Version



: 1.1

Europe

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

1.1 Product identifier	
Product name	: SIGMADUR 550 BASE RAL 6001
Product code	: 000001191173
Other means of identificatio	n
00454216	

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/ mixture	: Coating.		
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 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 Regulation (EC) No. 1272/2008 [CLP/GHS] Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 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.

Code : 000001191173	Date of issue/Date of revision	: 13 December 2024		
SIGMADUR 550 BASE RAL 6001				

SECTION 2: Hazards identification

2.2 Label elements	
Hazard pictograms	
Signal word	: Warning
Hazard statements	 Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. 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 INHALED: Call a POISON CENTER or doctor if you feel unwell.
Storage	: Store in a well-ventilated place. Keep container tightly closed.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations. P280, P210, P273, P304 + P312, P403 + P233, 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 requiren	<u>nents</u>
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	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: Prolonged or repeated contact may dry skin and cause irritation.

Code : 000001191173 SIGMADUR 550 BASE RAL 6001 Date of issue/Date of revision

: 13 December 2024

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture					
Product/ingredient name	Identifiers	% by weight	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
x ylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥10 - ≤25	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	ATE [Dermal] = 1700 mg/kg ATE [Inhalation (vapours)] = 11 mg/l	[1] [2]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥5.0 - ≤10	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[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	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
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 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[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 statements declared above.	-	[1] [2]

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.

<u>Type</u>

[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.

English (US)
-----------	-----

Code : 000001191173 SIGMADUR 550 BASE RAL 6001 Date of issue/Date of revision

: 13 December 2024

SECTION 3: Composition/information on ingredients

SECTION 4: First aid measures

4.1 Description of first aid m	easures
Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	: 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 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.
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 effect	<u>s</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympt	<u>oms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
4.3 Indication of any immedia	te 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.

Code	: 000001191173	Date of issue/Date of revision	: 13 December 2024
SIGMADUR	550 BASE RAL 6001		

SECTION 5: Firefighting measures

•	
5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising fr	rom the substance or mixture
Hazards from the substance or mixture	: Flammable liquid and vapor. 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 precautions 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 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				
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 fro entering. Do not touch or walk through spilled material. Shut off all ignition sour No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Pri adequate ventilation. Wear appropriate respirator when ventilation is inadequate on appropriate personal protective equipment.	rces. ovide		
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any inform Section 8 on suitable and unsuitable materials. See also the information in "For emergency personnel".			
6.2 Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, d and sewers. Inform the relevant authorities if the product has caused environme pollution (sewers, waterways, soil or air). Water polluting material. May be have the environment if released in large quantities.	ental		
6.3 Methods and materials for containment and cleaning up				
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools explosion-proof equipment. Dilute with water and mop up if water-soluble. Alter or if water-insoluble, absorb with an inert dry material and place in an appropriat disposal container. Dispose of via a licensed waste disposal contractor.	rnatively,		
English (US)	Europe	5/18		

Code : 0000 SIGMADUR 550 BAS	001191173 SE RAL 6001	Date of issue/Date of revision	: 13 December 2024
SECTION 6: A	ccidental release	emeasures	
Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers water courses, basements or confined areas. Wash spillages into an effluent treatme 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		vind. Prevent entry into sewers, illages into an effluent treatment e with non-combustible,	

6.4 Reference to other sections
 6.4 Reference to other sections
 container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
 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 ingest. Avoid breathing vapor or mist. 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 oxidizing 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 unlabeled 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.

Code : 000001191173

Date of issue/Date of revision

: 13 December 2024

SIGMADUR 550 BASE RAL 6001

SECTION 8: Exposure controls/personal protection

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).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
<mark>x</mark> ylene	EU OEL (Europe, 1/2022) [xylene, mixed isomers] Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m ³ . STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m ³ .
n-butyl acetate	EU OEL (Europe, 1/2022) STEL 15 minutes: 150 ppm. STEL 15 minutes: 723 mg/m ³ . TWA 8 hours: 241 mg/m ³ . TWA 8 hours: 50 ppm.
ethylbenzene	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 442 mg/m ³ . STEL 15 minutes: 200 ppm. STEL 15 minutes: 884 mg/m ³ .
toluene	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 192 mg/m ³ . TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m ³ . STEL 15 minutes: 100 ppm.

Recommended monitoring procedures : 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.

DNELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
xylene	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m ³	General population	Local
	DNEL	Long term Inhalation	65.3 mg/m ³	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 ³	Workers	Local
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
	DNEL	Short term Inhalation	260 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Systemic
n-butyl acetate	DNEL	Long term Inhalation	300 mg/m ³	Workers	Systemic
-	DNEL	Long term Dermal	11 mg/m ³	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
English (US)			Europe		7/18

Code : 000001191173 SIGMADUR 550 BASE RAL 6001 Date of issue/Date of revision

: 13 December 2024

SECTION 8: Exposure controls/personal protection

DNELLong term Dermal NEL3.4 mg/kg bw/day Short term DermalGeneral population General populationSystemic SystemicDNELLong term Dermal7 mg/kg bw/dayWorkersSystemicDNELLong term Inhalation12 mg/m³General populationSystemicDNELLong term Inhalation12 mg/m³General populationSystemicDNELLong term Inhalation300 mg/m³General populationSystemicDNELShort term Inhalation300 mg/m³General populationSystemicDNELShort term Inhalation300 mg/m³General populationSystemicDNELShort term Inhalation300 mg/m³General populationSystemicDNELShort term Inhalation300 mg/m³WorkersLocalDNELShort term Inhalation600 mg/m³WorkersSystemicDNELShort term Inhalation600 mg/m³WorkersSystemicDNELLong term Oral1.6 mg/kg bw/dayGeneral populationSystemicDNELLong term Inhalation77 mg/m³WorkersSystemicDNELLong term Inhalation15 mg/m³General populationSystemicDNELLong term Oral8.13 mg/kg bw/dayGeneral populationSystemicDNELLong term Inhalation77 mg/m³WorkersSystemicDNELLong term Inhalation77 mg/m³WorkersSystemicDNELLong term Inhalation192 mg/m³WorkersSystemicDNELL					A	.
DNEL DNEL DNELLong term Dermal Short term Dermal7 mg/kg bw/day 11 mg/kg bw/dayWorkersSystemic SystemicDNEL DNEL DNEL Long term InhalationLong term Inhalation DNEL Long term Inhalation12 mg/m³General population SystemicLocalDNEL DNEL DNELLong term Inhalation DNEL48 mg/m³WorkersSystemicDNEL DNEL DNELShort term Inhalation DNEL300 mg/m³General population General populationLocalDNEL DNEL DNELShort term Inhalation DNEL300 mg/m³WorkersLocalDNEL DNEL DNELShort term Inhalation DNEL600 mg/m³WorkersLocalDNEL DNEL DNEL DNEL DNEL DNEL DNEL Long term Inhalation600 mg/m³WorkersSystemicDNEL DNEL DNEL DNEL Long term Inhalation DNEL Long t		DNEL	Long term Dermal	3.4 mg/kg bw/day	General population	Systemic
DNELShort term Dermal DNEL11 mg/kg bw/day Long term Inhalation DNELWorkersSystemic LocalDNELLong term Inhalation DNELShort term Inhalation DNEL35.7 mg/m³ deneral populationGeneral population SystemicSystemic LocalDNELShort term Inhalation DNELShort term Inhalation DNEL300 mg/m³ deneral populationGeneral population SystemicLocalDNELShort term Inhalation DNELShort term Inhalation DNEL300 mg/m³ deneral populationGeneral population SystemicLocalDNELShort term Inhalation DNELShort term Inhalation DNEL600 mg/m³ dworkersWorkersLocalDNELShort term Inhalation DNELShort term Inhalation DMEL600 mg/m³ dworkersWorkersLocalDNELShort term Inhalation DMELLong term Oral DNEL1.6 mg/kg bw/day dworkersGeneral population SystemicSystemicDNELLong term Inhalation DNELLong term Inhalation DNEL15 mg/m³ dworkersWorkersSystemicDNELLong term Inhalation DNELCong term Oral DNEL1.8 mg/kg bw/day dworkersGeneral population SystemicSystemic LocaltolueneDNELLong term Inhalation DNEL77 mg/m³ dworkersWorkersSystemic LocalDNELLong term Inhalation DNELCong term Inhalation DNEL192 mg/m³ dworkersGeneral population Systemic LocalDNELLong term Inhalation DNELLong term Inhalation DN						
DNEL DNEL DNEL DNEL Long term Inhalation DNEL Long term Inhalation <b< td=""><td></td><td></td><td>0</td><td></td><td>Workers</td><td></td></b<>			0		Workers	
DNEL Long term Inhalation DNEL Long term Oral DNEL Long term Inhalation DNEL Long term Oral DNEL Long term Inhalation DNEL Long term Oral DNEL Long term Inhalation DNEL Long term Inhalati			Short term Dermal		Workers	
DNEL DNELLong term Inhalation DNEL48 mg/m³ 300 mg/m³WorkersSystemic LocalDNEL DNELShort term Inhalation DNEL300 mg/m³General population General populationSystemic LocalDNEL DNELShort term Inhalation DNEL300 mg/m³WorkersLocal LocalDNEL DNELShort term Inhalation DNEL600 mg/m³WorkersLocal LocalDNEL DNELShort term Inhalation DNEL600 mg/m³WorkersLocalDNEL DNELCong term Inhalation DNEL600 mg/m³WorkersSystemicDNEL DNELLong term Inhalation DNEL1.6 mg/kg bw/day UorkersGeneral population SystemicSystemicDNEL DNELLong term Inhalation DNEL1.6 mg/kg bw/day UorkersGeneral population SystemicSystemicDNEL DNEL DNELLong term Inhalation DNEL180 mg/kg bw/day UorkersWorkersSystemic LocaltolueneDNEL DNEL Long term Inhalation DNEL DNEL Long term Inhalation293 mg/m³ Soft mornalWorkersLocal Systemic LocaltolueneDNEL DNEL Long term Inhalation DNEL Long term Inhalation DNEL Long term Inhalation192 mg/m³ Soft mornal Soft mornal 192 mg/m³Workers General population Systemic General population Systemic LocalDNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL Long term Inhalation DNEL DNEL Long term Inhalation DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL D		DNEL	Long term Inhalation	12 mg/m³	General population	Systemic
DNEL DNELShort term Inhalation DNEL300 mg/m³ SignerGeneral population General populationLocal SystemicDNEL DNELLong term Inhalation DNEL300 mg/m³General population WorkersSystemic LocalDNEL DNELShort term Inhalation DNEL600 mg/m³WorkersLocalDNEL DNELShort term Inhalation DNEL600 mg/m³WorkersLocalDNEL DNELShort term Inhalation600 mg/m³WorkersSystemicDMEL DNELLong term Inhalation442 mg/m³WorkersSystemicDNEL DNELLong term Inhalation1.6 mg/kg bw/day DNELGeneral population SystemicSystemicDNEL DNEL DNELLong term Inhalation15 mg/m³WorkersSystemicDNEL DNEL DNELLong term Oral1.8 mg/kg bw/dayGeneral population SystemicSystemicDNEL DNEL DNEL DNELLong term Oral8.13 mg/kg bw/dayGeneral population SystemicSystemicDNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL Long term Inhalation192 mg/m³WorkersLocalDNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL Long term Inhalation192 mg/m³WorkersSystemicDNEL DN		DNEL	Long term Inhalation	35.7 mg/m³	General population	Local
DNEL ethylbenzeneDNEL Long term Inhalation DNELShort term Inhalation Inhalation DNEL300 mg/m³ S00 mg/m³General population WorkersSystemic LocalethylbenzeneDMEL DMELShort term Inhalation DMEL600 mg/m³ 600 mg/m³WorkersLocal LocalDMEL DMELLong term Inhalation DMEL600 mg/m³ 600 mg/m³WorkersLocal LocalDMEL DMELLong term Inhalation DMEL442 mg/m³ 884 mg/m³WorkersSystemic SystemicDMEL DNEL DNELLong term Oral DNEL1.6 mg/kg bw/day DNELGeneral population SystemicSystemic SystemicDNEL DNELLong term Inhalation DNEL15 mg/m³ BMEGeneral population SystemicSystemic SystemictolueneDNEL DNEL Long term Inhalation DNELLong term Oral DNEL8.13 mg/kg bw/day SystemicWorkers General population SystemictolueneDNEL DNEL Long term Inhalation DNEL DNEL Long term Inhalation56.5 mg/m³ SystemicGeneral population SystemictolueneDNEL DNEL Long term Inhalation DNEL DNEL Long term Inhalation192 mg/m³ SystemicWorkers General population SystemictolueneDNEL DNEL Long term Inhalation DNEL DNEL Long term Dermal DNEL DNEL Long term Dermal DNEL DNEL Long term Dermal DNEL Long term Dermal<		DNEL	Long term Inhalation	48 mg/m³	Workers	Systemic
DNEL ethylbenzeneDNEL DNELLong term Inhalation Short term Inhalation DNEL300 mg/m3 600 mg/m3Workers WorkersLocal LocalethylbenzeneDMEL DMELShort term Inhalation DMEL600 mg/m3 600 mg/m3WorkersLocal WorkersDMEL DMELLong term Inhalation DMEL442 mg/m3 Long term InhalationWorkersSystemic SystemicDMEL DMEL DNEL Long term InhalationShort term Inhalation DNEL Long term Inhalation16 mg/kg bw/day 293 mg/m3General population WorkersSystemic SystemicDNEL DNEL DNEL Long term Inhalation77 mg/m3 BNEL Long term InhalationWorkersSystemic SystemicDNEL DNEL Long term Inhalation180 mg/kg bw/day 293 mg/m3WorkersSystemic SystemictolueneDNEL DNEL Long term Inhalation DNEL Long term Inhalation293 mg/m3 StemicWorkersSystemic LocaltolueneDNEL DNEL Long term Inhalation DNEL Long term Inhalation56.5 mg/m3 StemicGeneral population SystemicSystemic LocaltolueneDNEL Long term Inhalation DNEL Long term Inhalation192 mg/m3 226 mg/kg bw/dayWorkersSystemic SystemictolueneDNEL Long term Inhalation DNEL Long term Inhalation192 mg/m3 226 mg/m3WorkersSystemic SystemictolueneDNEL Long term Inhalation DNEL DNEL Long term Inhalation192 mg/m3 226 mg/kg bw/dayGeneral population General population General population Systemic Sys		DNEL	Short term Inhalation	300 mg/m³	General population	Local
DNEL ethylbenzeneDNEL DMELShort term Inhalation DMEL600 mg/m3 (m3)WorkersLocalbMEL DMELLong term Inhalation DMELA42 mg/m3WorkersSystemicDMEL DNELLong term Inhalation DNELShort term Inhalation DNEL442 mg/m3WorkersSystemicDNEL DNELLong term Oral DNEL1.6 mg/kg bw/day DNELGeneral population SystemicSystemicDNEL DNELLong term Inhalation DNEL15 mg/m3WorkersSystemicDNEL DNELLong term Inhalation DNEL15 mg/m3WorkersSystemicDNEL DNELLong term Oral DNEL8.13 mg/kg bw/day SystemicWorkersSystemicDNEL DNELLong term Oral DNEL8.13 mg/kg bw/day SystemicGeneral population LocalSystemictolueneDNEL DNELLong term Inhalation DNEL56.5 mg/m3 SystemicGeneral population SystemicSystemic LocalDNEL DNELLong term Inhalation DNEL192 mg/m3WorkersLocalDNEL DNEL DNELLong term Inhalation DNEL192 mg/m3WorkersSystemic CocalDNEL DNEL DNEL DNELShort term Inhalation DNEL226 mg/m3 General population General population SystemicSystemic DocalDNEL DNEL DNEL DNELShort term Inhalation DNEL226 mg/m3 StemicGeneral population SystemicDNEL DNEL DNEL DNELLong term Dermal DNEL DNEL226 mg/m3 StemicGeneral po		DNEL	Short term Inhalation	300 mg/m³	General population	Systemic
ethylbenzeneDNEL DMELShort term Inhalation DMEL600 mg/m³ MorkersWorkersSystemicbMEL DMELLong term Inhalation DNELLong term Oral DNEL1.6 mg/kg bw/day 15 mg/m³General population General populationSystemicbNEL DNELLong term Inhalation DNELLong term Inhalation DNEL1.6 mg/kg bw/day Long term InhalationGeneral population SystemicSystemicbNEL DNELLong term Inhalation DNELTr mg/m³WorkersSystemicbNEL DNELLong term Dermal DNEL180 mg/kg bw/day SystemicWorkersSystemicbNEL DNELLong term Oral DNEL8.13 mg/kg bw/day SystemicGeneral population SystemicSystemictolueneDNEL DNEL Long term Inhalation DNELLong term Oral Long term Inhalation DNEL8.13 mg/kg bw/day Seneral populationGeneral population SystemicSystemictolueneDNEL DNEL Long term Inhalation DNELLong term Inhalation DNEL56.5 mg/m³ Seneral populationGeneral population SystemicLocalDNEL DNEL DNEL DNELLong term Inhalation DNEL192 mg/m³ Seneral populationWorkers SystemicSystemicDNEL DNEL DNEL DNELShort term Inhalation DNEL226 mg/m³ Seneral populationGeneral population SystemicSystemicDNEL <br< td=""><td></td><td>DNEL</td><td>Long term Inhalation</td><td>300 mg/m³</td><td>Workers</td><td>Local</td></br<>		DNEL	Long term Inhalation	300 mg/m ³	Workers	Local
ethylbenzeneDMELLong term Inhalation442 mg/m³WorkersLocalDMELShort term InhalationDNELLong term Oral1.6 mg/kg bw/dayGeneral populationSystemicDNELLong term InhalationDNELLong term Inhalation15 mg/m³WorkersSystemicDNELLong term InhalationDNELLong term Dermal180 mg/kg bw/dayWorkersSystemicDNELLong term OralShort term Inhalation293 mg/m³WorkersLocalDNELLong term Oral8.13 mg/kg bw/dayGeneral populationSystemicDNELLong term Inhalation56.5 mg/m³General populationSystemicDNELLong term Inhalation56.5 mg/m³General populationSystemicDNELLong term Inhalation192 mg/m³WorkersLocalDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/kg bw/dayWorkersSystemic		DNEL	Short term Inhalation	600 mg/m ³	Workers	Local
DMELShort term Inhalation884 mg/m³WorkersSystemicDNELLong term Oral1.6 mg/kg bw/dayGeneral populationSystemicDNELLong term Inhalation15 mg/m³WorkersSystemicDNELLong term Inhalation15 mg/m³WorkersSystemicDNELLong term Dermal180 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation293 mg/m³WorkersLocalDNELLong term Oral8.13 mg/kg bw/dayGeneral populationSystemicDNELLong term Inhalation56.5 mg/m³General populationSystemicDNELLong term Inhalation56.5 mg/m³General populationSystemicDNELLong term Inhalation192 mg/m³WorkersLocalDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationLocalDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Short term Inhalation	600 mg/m ³	Workers	Systemic
DNEL DNEL DNEL DNELLong term Oral Long term Inhalation DNEL1.6 mg/kg bw/day 15 mg/m3General population General population SystemicSystemic SystemicDNEL DNELLong term Inhalation DNEL15 mg/m3WorkersSystemicDNEL DNELLong term Dermal DNEL180 mg/kg bw/day Short term InhalationWorkersSystemicDNEL DNELShort term Inhalation DNEL293 mg/m3WorkersLocalDNEL DNELLong term Oral DNEL8.13 mg/kg bw/day General populationGeneral population LocalSystemicDNEL DNELLong term Inhalation DNEL56.5 mg/m3General population General populationSystemicDNEL DNELLong term Inhalation DNEL192 mg/m3WorkersLocalDNEL DNELLong term Inhalation DNEL192 mg/m3WorkersSystemicDNEL DNELLong term Dermal DNEL226 mg/m3General population General populationSystemic LocalDNEL DNELShort term Inhalation DNEL226 mg/m3General population General populationSystemic LocalDNEL DNEL DNELShort term Inhalation DNEL226 mg/m3General population General populationSystemic LocalDNEL DNEL DNELShort term Inhalation DNEL226 mg/m3General population General populationSystemic LocalDNEL DNEL DNELShort term Inhalation DNEL384 mg/kg bw/day StemicWorkersSystemic Local </td <td>ethylbenzene</td> <td>DMEL</td> <td>Long term Inhalation</td> <td>442 mg/m³</td> <td>Workers</td> <td>Local</td>	ethylbenzene	DMEL	Long term Inhalation	442 mg/m ³	Workers	Local
DNEL DNEL DNEL DNELLong term Oral Long term Inhalation DNEL1.6 mg/kg bw/day 15 mg/m3General population General population SystemicSystemic SystemicDNEL DNELLong term Inhalation DNEL15 mg/m3WorkersSystemicDNEL DNELLong term Dermal DNEL180 mg/kg bw/day Short term InhalationWorkersSystemicDNEL DNELShort term Inhalation DNEL293 mg/m3WorkersLocalDNEL DNELLong term Oral DNEL8.13 mg/kg bw/day General populationGeneral population LocalSystemicDNEL DNELLong term Inhalation DNEL56.5 mg/m3General population General populationSystemicDNEL DNELLong term Inhalation DNEL192 mg/m3WorkersLocalDNEL DNELLong term Inhalation DNEL192 mg/m3WorkersSystemicDNEL DNELLong term Dermal DNEL226 mg/m3General population General populationSystemic LocalDNEL DNELShort term Inhalation DNEL226 mg/m3General population General populationSystemic LocalDNEL DNEL DNELShort term Inhalation DNEL226 mg/m3General population General populationSystemic LocalDNEL DNEL DNELShort term Inhalation DNEL226 mg/m3General population General populationSystemic LocalDNEL DNEL DNELShort term Inhalation DNEL384 mg/kg bw/day StemicWorkersSystemic Local </td <td></td> <td>DMEL</td> <td>Short term Inhalation</td> <td>884 mg/m³</td> <td>Workers</td> <td>Systemic</td>		DMEL	Short term Inhalation	884 mg/m ³	Workers	Systemic
DNELLong term Inhalation77 mg/m³WorkersSystemicDNELLong term Dermal180 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation293 mg/m³WorkersLocalDNELLong term Oral8.13 mg/kg bw/dayGeneral populationSystemicDNELLong term Inhalation56.5 mg/m³General populationLocalDNELLong term Inhalation56.5 mg/m³General populationLocalDNELLong term Inhalation192 mg/m³WorkersLocalDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Inhalation192 mg/m³General populationSystemicDNELLong term Inhalation126 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationLocalDNELShort term Inhalation226 mg/m³General populationLocalDNELShort term Inhalation226 mg/m³General populationLocalDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Long term Oral		General population	Systemic
DNEL tolueneDNEL DNELLong term Dermal Short term Inhalation DNEL180 mg/kg bw/day 293 mg/m³Workers WorkersSystemic LocaltolueneDNEL DNELLong term Oral DNEL8.13 mg/kg bw/day 56.5 mg/m³General population General populationSystemic LocalDNEL DNELLong term Inhalation DNELLong term Inhalation DNEL56.5 mg/m³ 192 mg/m³General population WorkersSystemic LocalDNEL DNELLong term Inhalation DNEL192 mg/m³ Long term InhalationWorkers SystemicLocal SystemicDNEL DNELLong term Inhalation DNEL192 mg/m³ Long term DermalWorkers SystemicSystemic LocalDNEL DNELShort term Inhalation DNELShort term Inhalation Short term Inhalation226 mg/m³ StemicGeneral population SystemicSystemic SystemicDNEL DNELShort term Inhalation DNEL226 mg/m³ StemicGeneral population SystemicLocal SystemicDNEL DNELShort term Inhalation DNEL226 mg/m³ StemicGeneral population SystemicLocalDNEL DNELShort term Inhalation DNELStort term Inhalation StermicSystemic SystemicSystemic SystemicDNEL DNELShort term Inhalation Short term InhalationStemic StemicSystemic SystemicDNEL DNELShort term Inhalation Short term InhalationStemic StemicSystemic SystemicDNEL DNELShort term Inhalation Short term InhalationStemi		DNEL	Long term Inhalation	15 mg/m ³	General population	Systemic
InternationDNELShort term Inhalation293 mg/m³WorkersLocalDNELLong term Oral8.13 mg/kg bw/dayGeneral populationSystemicDNELLong term Inhalation56.5 mg/m³General populationLocalDNELLong term Inhalation56.5 mg/m³General populationSystemicDNELLong term Inhalation192 mg/m³WorkersLocalDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Inhalation226 mg/kg bw/dayGeneral populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation384 mg/kg bw/daySystemicSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
InternationDNELShort term Inhalation293 mg/m³WorkersLocalInternationDNELLong term Oral8.13 mg/kg bw/dayGeneral populationSystemicInternationDNELLong term Inhalation56.5 mg/m³General populationSystemicInternationDNELLong term Inhalation56.5 mg/m³General populationSystemicInternationDNELLong term Inhalation192 mg/m³WorkersLocalInternationDNELLong term Inhalation192 mg/m³WorkersSystemicInternationDNELLong term Inhalation192 mg/m³WorkersSystemicInternationDNELLong term Inhalation226 mg/m³General populationSystemicInternationDNELShort term Inhalation226 mg/m³General populationSystemicInternationDNELShort term Inhalation226 mg/m³General populationSystemicInternationDNELShort term Inhalation226 mg/m³General populationSystemicInternationDNELShort term Inhalation384 mg/kg bw/dayWorkersSystemicInternationShort term Inhalation384 mg/m³WorkersLocal		DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
DNEL DNEL DNELLong term Inhalation Long term Inhalation56.5 mg/m³ 56.5 mg/m³General population General populationLocal SystemicDNEL DNELLong term Inhalation DNEL192 mg/m³WorkersLocalDNEL DNELLong term Inhalation DNEL192 mg/m³WorkersSystemicDNEL DNELLong term Dermal DNEL226 mg/kg bw/day 226 mg/m³General population General populationSystemicDNEL DNELShort term Inhalation DNEL226 mg/m³General population General populationSystemicDNEL DNELShort term Inhalation DNEL226 mg/m³General population General populationSystemicDNEL DNELShort term Inhalation DNEL384 mg/kg bw/day 384 mg/m³WorkersSystemic		DNEL	Short term Inhalation	293 mg/m ³	Workers	Local
DNELLong term Inhalation56.5 mg/m³General populationSystemicDNELLong term Inhalation192 mg/m³WorkersLocalDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Dermal226 mg/kg bw/dayGeneral populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELLong term Dermal384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal	toluene	DNEL	Long term Oral	8.13 mg/kg bw/day	General population	Systemic
DNELLong term Inhalation192 mg/m³WorkersLocalDNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Dermal226 mg/kg bw/dayGeneral populationSystemicDNELShort term Inhalation226 mg/m³General populationLocalDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELLong term Dermal384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Long term Inhalation	56.5 mg/m ³	General population	Local
DNELLong term Inhalation192 mg/m³WorkersSystemicDNELLong term Dermal226 mg/kg bw/dayGeneral populationSystemicDNELShort term Inhalation226 mg/m³General populationLocalDNELShort term Inhalation226 mg/m³General populationSystemicDNELShort term Inhalation226 mg/m³General populationSystemicDNELLong term Dermal384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Long term Inhalation	56.5 mg/m ³	General population	Systemic
DNELLong term Dermal226 mg/kg bw/dayGeneral populationSystemicDNELShort term Inhalation226 mg/m³General populationLocalDNELShort term Inhalation226 mg/m³General populationSystemicDNELLong term Dermal384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Long term Inhalation	192 mg/m³	Workers	Local
DNELShort term Inhalation226 mg/m³General populationLocalDNELShort term Inhalation226 mg/m³General populationSystemicDNELLong term Dermal384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Long term Inhalation	192 mg/m³	Workers	Systemic
DNELShort term Inhalation226 mg/m³General populationSystemicDNELLong term Dermal384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Long term Dermal	226 mg/kg bw/day	General population	Systemic
DNELLong term Dermal384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Short term Inhalation		General population	
DNELLong term Dermal384 mg/kg bw/dayWorkersSystemicDNELShort term Inhalation384 mg/m³WorkersLocal		DNEL	Short term Inhalation	226 mg/m ³	General population	Systemic
DNEL Short term Inhalation 384 mg/m ³ Workers Local		DNEL	Long term Dermal	384 mg/kg bw/day	Workers	Systemic
		DNEL	Short term Inhalation		Workers	Local
		DNEL	Short term Inhalation	384 mg/m ³	Workers	Systemic

PNECs

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
xylene	-	Fresh water	0.327 mg/l	-
-	-	Marine water	0.327 mg/l	-
	-	Sewage Treatment Plant	6.58 mg/l	-
	-	Fresh water sediment	12.46 mg/kg dwt	-
	-	Marine water sediment	12.46 mg/kg dwt	-
	-	Soil	2.31 mg/kg	-
n-butyl acetate	-	Fresh water	0.18 mg/l	-
	-	Marine water	0.018 mg/l	-
	-	Fresh water sediment	0.981 mg/kg	-
	-	Marine water sediment	0.0981 mg/kg	-
	-	Sewage Treatment Plant	35.6 mg/l	-
	-	Soil	0.0903 mg/kg	-
ethylbenzene	-	Fresh water	0.1 mg/l	Assessment Factors
-	-	Marine water	0.01 mg/l	Assessment Factors
	-	Sewage Treatment Plant	9.6 mg/l	Assessment Factors
	-	Fresh water sediment	13.7 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	1.37 mg/kg dwt	Equilibrium Partitioning
	-	Soil	2.68 mg/kg dwt	Equilibrium Partitioning
	-	Secondary Poisoning	20 mg/kg	-
toluene	-	Fresh water	0.68 mg/l	Sensitivity Distribution
	-	Marine water	0.68 mg/l	Sensitivity Distribution
	-	Sewage Treatment Plant	13.61 mg/l	Sensitivity Distribution
	-	Fresh water sediment	16.39 mg/kg dwt	Equilibrium Partitioning
	-	Marine water sediment	16.39 mg/kg dwt	-
English (US)		Europe		8/18

Code : 000001191173 SIGMADUR 550 BASE RAL 6001 Date of issue/Date of revision

: 13 December 2024

SIGMADUR 550 BASE RAL 6001

SECTION 8: Exposure controls/personal protection

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, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Individual protection measu	ures	
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	:	Chemical splash goggles. Use eye protection according to EN 166.
Skin protection		
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	:	nitrile rubber, butyl rubber, PVC, Viton®
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 anti- static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
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 vapor (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.

Code	: 000001191173	Date of issue/Date of revision	: 13 December 2024
SIGMADUR 5	550 BASE RAL 6001		

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 physica	al a	nd chemical proper	ties					
<u>Appearance</u>								
Physical state	:	Liquid.						
Color	:	Green.						
Odor	1	Aromatic. [Slight]						
Melting point/freezing point	1	Not determined.						
Boiling point or initial boiling point and boiling range	:	>37.78°C						
Flammability	1	Not determined. The	ere are no	data av	ailable on f	the mixture	itself.	
Lower and upper explosion limit	:	Not available.						
Flash point	:	Closed cup: 33°C						
Auto-ignition temperature	:							
		Ingredient name		°C	°F		Method	
		N-(2,3-dihydro-2-oxo-1H- benzimidazol-5-yl)-3-oxo (trifluoromethyl)phenyl]az	-2-[[2-	290 e	554	4		
Decomposition temperature	:	Stable under recomm	mended st	orage a	nd handlin	g condition	s (see Sec	tion 7).
рН	:	Not applicable. insol	uble in wa	ter.				
Viscosity	:	Dynamic (room temp Kinematic (room tem Kinematic (40°C): >2	nperaturé)					
Viscosity	:	60 - 100 s (ISO 6mm	ר)					
Solubility	:	·						
Media		Result						
cold water		Not soluble						
Partition coefficient n-octanol/ water (log Pow)	:	Not applicable.						
Vapor pressure	:		Vano	r Press	ure at 20°	C Va	por press	ure at 50°
		Ingredient name	mm Hg		Method		kPa	Method
		ingreatent name	iiiii iig	ni a	Wethou	Hg	Ki a	Methou
		p≁butyl acetate	11.25096	1.5	DIN EN 13016-2			
Relative density	:	1.31						
Particle characteristics								
		Not applicable.						
Median particle size								
			es					
9.2 Other information	o pł		not explos		the format	tion of an e	xplosible n	nixture of

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: oxidizing agents, strong alkalis, strong acids.
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 hazard classes as defined in Regulation (EC) No 1272/2008

The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
x ylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
n-butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/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,	3230 mg/kg	-
		Female		
toluene	LC50 Inhalation Vapor	Rat	49 g/m³	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-

Acute toxicity estimates

Route	ATE value
Øermal	6957.07 mg/kg
Inhalation (vapors)	40.55 mg/l

Conclusion/Summary : Based on available d

: Based on available data, the classification criteria are not met.

English (US)	Europe	11/18

Code : 000001191173 SIGMADUR 550 BASE RAL 6001 Date of issue/Date of revision

: 13 December 2024

SECTION 11: Toxicological information

Irritation/Corrosion

Product/ingredient name		Result	Species	Score	Exposure	Observation
xylene		Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Conclusion/Summary					I	1
Skin : Causes skin irritation.		kin irritation.				
Eyes	: Causes serious eye irritation.					
Respiratory	Based on available data, the classification criteria are not met.					
Respiratory or skin sensitization						
Conclusion/Summary						

- Skin
- Respiratory

: May cause an allergic skin reaction.

: Based on available data, the classification criteria are not met.

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.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3		Respiratory tract irritation
n-butyl acetate	Category 3		Narcotic effects
toluene	Category 3		Narcotic effects

Conclusion/Summary

May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

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

Conclusion/Summary

2 Based on available data, the classification criteria are not met.

Aspiration hazard

Product/ingredient name	Result
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1

Conclusion/Summary

ż Based on available data, the classification criteria are not met.

Information on the likely : Not available.

routes of exposure

- Inhalation : May cause respiratory irritation.
- : No known significant effects or critical hazards. Ingestion

Code	: 0000011	91173		Date of issue/Date of revision	: 13 December 2024
SIGMADUR	550 BASE F	RAL 600	1		

SECTION 11: Toxicological information

	- 3
Skin contact	: Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
Eye contact	: Causes serious eye irritation.
Symptoms related to the ph	ysical, chemical and toxicological characteristics
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Ingestion	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Delayed and immediate effe	cts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
<u>Long term exposure</u>	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
Potential chronic health effe	<u>ects</u>
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.
Reproductive toxicity	: No known significant effects or critical hazards.
Other information	: Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.
11.2 Information on other haz	zards
11.2.1 Endocrino disrupting	properties

11.2.1 Endocrine disrupting properties

Based on available data, the classification criteria are not met.

11.2.2 Other information

Not available.

Code	: 000001191173	Date of issue/Date of revision	: 13 December 2024
SIGMAD	UR 550 BASE RAL 6001		

SECTION 12: Ecological information

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
p -butyl acetate	Acute LC50 18 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
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 : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
-butyl acetate	TEPA and OECD 301D	83 % - Readily - 28 day	/S	-	-
ethylbenzene	-	79 % - Readily - 10 day	/S	-	-
Product/ingredient name		Aquatic half-life	Photo	lysis	Biodegradability
xylene n-butyl acetate ethylbenzene toluene		- - - -	- - - -		Readily Readily Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
x ylene	3.12	7.4 to 18.5	Low
n-butyl acetate	2.3	-	Low
ethylbenzene	3.6	79.43	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 Endocrine disrupting properties

Based on available data, the classification criteria are not met.

Code : 000001191173 SIGMADUR 550 BASE RAL 6001 Date of issue/Date of revision

: 13 December 2024

SECTION 12: Ecological information

12.7 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 minimized 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 nonrecyclable 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

European waste catalogue (EWC)

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 minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 		
Type of packaging	European waste catalogue (EWC)		
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. Vapor 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 spilled material and runoff and contact with soil, waterways drains and sewers.		

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number or ID 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	Ш
14.5 Environmental hazards	No.	Yes.	No.	No.
English (US)	I	Euro	ре	15/18

Conforms to Regulation ((EC) No. 1907/2006	(REACH), Annex II, a	as amended by Cor	nmission Regulation (I	EU)
2020/878					

Code : 00000 SIGMADUR 550 BAS	01191173 E RAL 6001	Date of issue/Da	te of revision :	13 December 2024
SECTION 14: Transport information				
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information

ADR/RID	: This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1.
Tunnel code	: (D/E)
ADN	: The product is only regulated as an environmentally hazardous substance when transported in tank vessels. This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1.
IMDG	: This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.
ΙΑΤΑ	: None identified.
14.6 Special precuser	cautions 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 Maritime tra bulk according to	• • • • • • • • • • • • • • • • • • • •

instruments

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

Annex XIV

None of the components are listed.

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

Product/ingredient name	Entry Number (REACH)
GMADUR 550 BASE RAL 6001	3
toluene	48

Labeling

: Not applicable.

Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria Catogory

Calegory
P5c

15.2 Chemical Safety Assessment

: No Chemical Safety Assessment has been carried out.

English (US)

Code: 000001191173Date of issue/Date of revision:

: 13 December 2024

SIGMADUR 550 BASE RAL 6001

SECTION 16: Other information

Indicates information that has changed from previously issued version.

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

PBT = Persistent, Bioaccumulative and Toxic

vPvB = Very Persistent and Very Bioaccumulative

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

IMDG = International Maritime Dangerous Goods

IATA = International Air Transport Association

Full text of abbreviated H statements

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
-	
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.
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 [CLP/	3491

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4	
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1	
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1	
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3	
Aquatic Chronic 4	AQUATIC HAZARD (LONG-TERM) - Category 4	
Asp. Tox. 1	ASPIRATION HAZARD - 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. 2	TOXIC TO REPRODUCTION - Category 2	
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2	
Skin Sens. 1	SKIN SENSITIZATION - Category 1	
Skin Sens. 1A	SKIN SENSITIZATION - Category 1A	
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) -	
	Category 2	
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) -	
	Category 3	

<u>History</u>

English (US) Europe	17/18
---------------------	-------

Code : 000001191173 SIGMADUR 550 BASE RAL 6001		Date of issue/Date of revision	: 13 December 2024
SECTION 16: Other	r information		
Date of issue/ Date of revision	: 13 December 2024	4	
Date of previous issue	: 1 October 2024		
Prepared by	: EHS		
Version	: 1.1		

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.