# SAFETY DATA SHEET

Date of issue/Date of revision

: 8 May 2024

: 1.04 Version



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

1.1 Product identifier	
Product name	: SIGMADUR 550 BASE CNC5045
Product code	: 00298363
Product type	: Liquid.
Other means of identification	: Not available.
1.2 Relevant identified use	s 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

: Mixture **Product definition Classification according to UK CLP/GHS** Flam. Liq. 3, H226 Skin Sens. 1, H317 Carc. 1B, H350 STOT SE 3, H335 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)

Code : 00298363 SIGMADUR 550 BASE CM		: 8 May 2024	
SECTION 2: Hazards identification			
Hazard statements	Flammable liquid and vanour		

Hazard statements	:	Flammable liquid and vapour. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness. May cause cancer. Harmful to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and 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 exposed or concerned: Get medical advice or attention.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations. P202, P280, P210, P273, P308 + P313, 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	:	Restricted to professional users.
Special packaging requirem	en	<u>ts</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 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 vPvB.
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	Туре
2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 1,2-propanediol mono(2-methyl- 2-propenoate) and 2-propenoic acid	CAS: 37237-99-3	≥25 - ≤50	Skin Sens. 1, H317	[1]
Hydrocarbons, C9, aromatics > 0.1% cumene	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6	≥10 - <20	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]
ethylbenzene	REACH #: 01-2119489370-35	≥5.0 - <10	Flam. Liq. 2, H225 Acute Tox. 4, H332	[1] [2]
English (GB)	United King	dom (UK)		2/17

GMADUR 550 BASE CNC504		issue/Date of revis	sion : 8 May 2024	
SECTION 3: Composit	ion/information on i	ngredients		
	EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4		STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	
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]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥1.0 - ≤5.0	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]
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-piperid sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidy sebacate	EC: 915-687-0	≤0.37	Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
propylidynetrimethanol	REACH #: 01-2119486799-10 EC: 201-074-9 CAS: 77-99-6	≤0.30	Repr. 2, H361fd See Section 16 for the full text of the H	[1]

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

above.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

This mixture contains  $\geq$  1% of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.

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

English (GB)	United Kingdom (UK)	3/17	
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and w or use recognised skin cleanser. Do NOT use solvents or thinners.	/ater	
Inhalation	<ul> <li>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 tra personnel.</li> </ul>		
Eye contact	<ul> <li>Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.</li> </ul>		

Code         : 00298363           SIGMADUR 550 BASE CNC5045	Date of issue/Date of revision	: 8 May 2024
SECTION 4: First aid measures		

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 eff	<u>ects</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	<ul> <li>Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.</li> </ul>
Skin contact	: Defatting to the skin. May cause skin dryness and irritation. May cause an allergic ski reaction.
Ingestion	: Can cause central nervous system (CNS) depression.
Over-exposure signs/sy	<u>mptoms</u>
Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
4.3 Indication of any imm	ediate medical attention and special treatment needed
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large
	quantities have been ingested or inhaled.
Spacific troatmonte	No specific treatment

**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 f	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 sulfur oxides metal oxide/oxides
Frank (OD)	

English (GB)	United Kingdom (UK)	4/17

SIGMADUR	550 BASE CNC5045		
Code	: 00298363	Date of issue/Date of revision	: 8 May 2024

### **SECTION 5: Firefighting measures**

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 mode.

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

6.1 Personal precautions, pro	tective 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. Avoid breathing 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
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 spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

6.4 Reference to other<br/>sections: See Section 1 for emergency contact information.<br/>See Section 8 for information on appropriate personal protective equipment.<br/>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

Code : 00298363	Date of issue/Date of revision	: 8 May 2024
SIGMADUR 550 BASE CNC5045		
SECTION 7: Handling and storage		

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. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour 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

### 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.

information on hygiene measures.

### 7.3 Specific end use(s)

See Section 1.2 for Identified uses.

### **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**

Exposure limit values	
EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 552 mg/m <sup>3</sup> 15 minutes. STEL: 125 ppm 15 minutes. TWA: 441 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.	
EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 966 mg/m <sup>3</sup> 15 minutes. STEL: 200 ppm 15 minutes. TWA: 724 mg/m <sup>3</sup> 8 hours. TWA: 150 ppm 8 hours.	
EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-,p- or mixed isomers] Absorbed through skin. STEL: 441 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.	

English (GB)	United Kingdom (UK)	6/17

98363

Date of issue/Date of revision

: 8 May 2024

SIGMADUR 550 BASE CNC5045

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

### Biological exposure indices

Product/ingredient name	Exposure indices
xylene	XYLENES
	Id be made to appropriate monitoring standards. Reference to ce documents for methods for the determination of hazardous

national guidance documents for methods for the determination of hazardous substances will also be required.

### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Hydrocarbons, C9, aromatics	DNEL	Long term Inhalation	150 mg/m³	Workers	Systemic
> 0.1% cumene		Long torm Dormal	25 mg/kg bw/dov	Markara	Sustamia
	DNEL 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
othylhonzono	DNEL	Long term Oral	11 mg/kg bw/day	General population Workers	Systemic Local
ethylbenzene	DMEL	Long term Inhalation Short term Inhalation	442 mg/m³ 884 mg/m³	Workers	Systemic
	DNEL		1.6 mg/kg bw/day		
	DNEL	Long term Oral Long term Inhalation	15 mg/m <sup>3</sup>	General population General population	Systemic Systemic
	DNEL	Long term Inhalation	77 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	$293 \text{ mg/m}^3$	Workers	Local
n-butyl acetate	DNEL	Long term Inhalation	300 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	11 mg/m <sup>3</sup>	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/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	35.7 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	48 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	300 mg/m <sup>3</sup>	General population	
	DNEL	Short term Inhalation	300 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	300 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	600 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	600 mg/m <sup>3</sup>	Workers	Systemic
xylene	DNEL	Long term Oral	5 mg/kg bw/day	General population	
	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	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/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	260 mg/m <sup>3</sup>	General population	
	DNEL	Short term Inhalation	260 mg/m <sup>3</sup>	General population	
	DNEL	Short term Inhalation	442 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	442 mg/m <sup>3</sup>	Workers	Systemic
propylidynetrimethanol	DNEL	Long term Oral	0.34 mg/kg bw/day	General population	
	DNEL	Long term Dermal	0.34 mg/kg bw/day	General population	
	DNEL	Long term Inhalation	0.58 mg/m <sup>3</sup>	General population	
	DNEL	Long term Dermal	0.94 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.3 mg/m <sup>3</sup>	Workers	Systemic
	L	5	č		-

**PNECs** 

Code : 00298363 Date of issue/Date of revision

: 8 May 2024

SIGMADUR 550 BASE CNC5045

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

Product/ingredient name	Compartment Detail	Value	Method Detail
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	-
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	-
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	-

Hygiene measures:W ea Ap Cd cc cc shinEye/face protection Skin protection:ClHand protection:ClHand protection:ClGlup glup pr free (b (b WW (b) Th pr ass bu Cd:Body protection:Pe pe ha state state state stateOther skin protection:Ap cd <th>becaulty. Considering the parameters specified by the glove matrial activity, effect aring use that the gloves are still retaining their protective properties. It should be beted that the time to breakthrough for any glove material may be different for different ove manufacturers. In the case of mixtures, consisting of several substances, the otection time of the gloves cannot be accurately estimated. When prolonged or equently repeated contact may occur, a glove with a protection class of 6 reakthrough time greater than 480 minutes according to EN 374) is recommended. Then only brief contact is expected, a glove with a protection class of 2 or higher reakthrough 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 oduct is the most appropriate and takes into account the particular conditions of use, is included in the user's risk assessment. The user's risk assessment. The protective equipment for the body should be selected based on the task being erformed and the risks involved and should be approved by a specialist before andling this product. When there is a risk of ignition from static electricity, wear anti- atic protective clothing. For the greatest protection from static discharges, clothing hould include anti-static overalls, boots and gloves. Depropriate footwear and any additional skin protection measures should be approved by a becialist before handling this product.</th>	becaulty. Considering the parameters specified by the glove matrial activity, effect aring use that the gloves are still retaining their protective properties. It should be beted that the time to breakthrough for any glove material may be different for different ove manufacturers. In the case of mixtures, consisting of several substances, the otection time of the gloves cannot be accurately estimated. When prolonged or equently repeated contact may occur, a glove with a protection class of 6 reakthrough time greater than 480 minutes according to EN 374) is recommended. Then only brief contact is expected, a glove with a protection class of 2 or higher reakthrough 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 oduct is the most appropriate and takes into account the particular conditions of use, is included in the user's risk assessment. The user's risk assessment. The protective equipment for the body should be selected based on the task being erformed and the risks involved and should be approved by a specialist before andling this product. When there is a risk of ignition from static electricity, wear anti- atic protective clothing. For the greatest protection from static discharges, clothing hould include anti-static overalls, boots and gloves. Depropriate footwear and any additional skin protection measures should be approved by a becialist before handling this product.
Hygiene measures       :       W         Ap       Cd         Eye/face protection       :       Cl         Skin protection       :       Cl         Hand protection       :       Cl         Hand protection       :       Cl         Body protection       :       Cl         Body protection       :       Pe         pe       ha       st	uring use that the gloves are still retaining their protective properties. It should be been been been been been been been b
Hygiene measures       :       W         ea       Ap         Col       Col         Eye/face protection       :       Cl         Skin protection       :       Cl         Hand protection       :       Cl         We       .       .         Hand protection       :       Cl         We       .       .         Joint       :       Cl         We       .       .         Hand protection       :       Cl         We       .       .         Up       .       .         Up       .       .         Hand protection       :       Cl         We       .       .         Up       .       .         .       .       .         .       .       .         .       .       .         .       .       .         .       .       .         .       .       .         .       .       .         .       .       .         .       .       .         .       .       <	uring use that the gloves are still retaining their protective properties. It should be oted that the time to breakthrough for any glove material may be different for different ove manufacturers. In the case of mixtures, consisting of several substances, the otection time of the gloves cannot be accurately estimated. When prolonged or equently repeated contact may occur, a glove with a protection class of 6 reakthrough time greater than 480 minutes according to EN 374) is recommended. Then only brief contact is expected, a glove with a protection class of 2 or higher reakthrough 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 oduct is the most appropriate and takes into account the particular conditions of use, included in the user's risk assessment.
Hygiene measures       : W         ea       Ap         Co       Co         cos       sh         Eye/face protection       : Cl	hemical-resistant, impervious gloves complying with an approved standard should be orn at all times when handling chemical products if a risk assessment indicates this is acessary. Considering the parameters specified by the glove manufacturer, check
Hygiene measures : W ea Ap Co co sh	hemical splash goggles.
	Yash hands, forearms and face thoroughly after handling chemical products, before ating, smoking and using the lavatory and at the end of the working period. opropriate techniques should be used to remove potentially contaminated clothing. ontaminated work clothing should not be allowed out of the workplace. Wash ontaminated clothing before reusing. Ensure that eyewash stations and safety nowers are close to the workstation location.
Individual protection measures	
ar va	other engineering controls to keep worker exposure to airborne contaminants below by recommended or statutory limits. The engineering controls also need to keep gas, apour or dust concentrations below any lower explosive limits. Use explosion-proof entilation equipment.

Code : 00298363	Date of issue/Date of revision	: 8 May 2024
SIGMADUR 550 BASE CNC5045		

# SECTION 8: Exposure controls/personal protection

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.

.1 Information on basic phys	sical and c	hemical pr	operties				
Appearance							
Physical state	: Liqu	uid.					
Colour	: Not	: Not available.					
Odour	: Not	: Not available.					
Odour threshold	: Not	: Not available.					
Melting point/freezing point	on o	<ul> <li>May start to solidify at the following temperature: -43.77°C (-46.8°F) This is based on data for the following ingredient: 1,2,4-trimethylbenzene. Weighted average: -77.91°C (-108.2°F)</li> </ul>					
Initial boiling point and boiling range	: >37	7.78°C (>10	0°F)				
Flammability (solid, gas)	: liqu	id					
Upper/lower flammability or explosive limits		atest knowi t aromatic)	n range: Lower: 1	.4% Upper: 7.6	6% (Solvent	naphtha (petroleum)	
Flash point	: Clo	sed cup: 31	°C (87.8°F)				
Auto-ignition temperature	:						
Ingredient name		°C	°F	N	<b>lethod</b>		
n-butyl acetate		415	779	E	U A.15		
pH Viscosity	Not	••	insoluble in wate m temperature): ፡				
			C): >21 mm²/s′				
Solubility(ies)	:						
Media	R	esult					
cold water	N	ot soluble					
Miscible with water	: No.						
Partition coefficient: n-octai water	nol/ : Not	applicable.					
Vapour pressure	:						
	V	apour Pres	sure at 20°C	\	apour pres	ssure at 50°C	
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
n-butyl acetate	11.25096	1.5	DIN EN 13016-2	2			
Relative density	: 1.3	7	<b> </b>		1	I	
Vapour density			value: 4.1 (Air =	A) (4 0 4 1 ·		\ \ <b>A</b>	

Code : 00298363 SIGMADUR 550 BASE CNC5045	Date of issue/Date of revision	: 8 May 2024
SECTION 9: Physical and che	mical properties	

•	· ·
Explosive properties	<ul> <li>The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.</li> </ul>
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 ingre	edients.
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 oc	cur.
10.4 Conditions to avoid	When exposed to high temperatures may produce hazardous decomposition Refer to protective measures listed in sections 7 and 8.	n products.
10.5 Incompatible materials	Keep away from the following materials to prevent strong exothermic reactio oxidising agents, strong alkalis, strong acids.	ons:
10.6 Hazardous decomposition products	Depending on conditions, decomposition products may include the following materials: carbon oxides sulfur oxides metal oxide/oxides	

# **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-Propenoic acid, 2-methyl-, methyl ester, polymer with	LD50 Oral	Rat	>5000 mg/kg	-
butyl 2-propenoate, ethenylbenzene,				
1,2-propanediol mono				
(2-methyl-2-propenoate)				
and 2-propenoic acid				
Hydrocarbons, C9,	LD50 Dermal	Rabbit	>3160 mg/kg	-
aromatics > 0.1% cumene				
<i></i>	LD50 Oral	Rat - Female	3492 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
	LD50 Dermal LD50 Oral	Rabbit	17.8 g/kg	-
n-butyl acetate	LC50 Inhalation Vapour	Rat Rat	3.5 g/kg >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	-
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	5250 mg/kg	-
propylidynetrimethanol	LD50 Dermal	Rabbit	10 g/kg	-
	LD50 Oral	Rat	14000 mg/kg	-
English (GB)	United	Kingdom (UK)		10/

Code : 00298363

Date of issue/Date of revision

: 8 May 2024

SIGMADUR 550 BASE CNC5045

## **SECTION 11: Toxicological information**

### 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 550 BASE CNC5045	N/A	47670.7	N/A	149.8	N/A
Hydrocarbons, C9, aromatics > 0.1% cumene	3492	N/A	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	N/A
n-butyl acetate	10768	N/A	N/A	N/A	N/A
xylene	4300	1700	N/A	11	N/A
Reaction mass of bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	3230	N/A	N/A	N/A	N/A
propylidynetrimethanol	14000	10000	N/A	N/A	N/A

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation	
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-	
Conclusion/Summary Skin	<ul><li>Not available.</li><li>There are no data available on the mixture itself.</li></ul>					
Eyes	: There are no data available on the mixture itself.					
Respiratory	: There are no data available of	n the mixture its	self.			

### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result				
2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 1,2-propanediol mono (2-methyl-2-propenoate) and 2-propenoic acid	skin	Mouse	Sensitising				
Conclusion/Summary							
Skin	: There are no dat	ta available on the mixture itself.					
Respiratory	: There are no dat	ta available on the mixture itself.					
Mutagenicity							
Conclusion/Summary	: There are no dat	ta available on the mixture itself.					
<b>Carcinogenicity</b>							
Conclusion/Summary							
Reproductive toxicity	· · · · · · · · · · · · · · · · · · ·						
Conclusion/Summary <u>Teratogenicity</u>	: There are no dat	ta available on the mixture itself.					
Conclusion/Summary	: There are no da	ta available on the mixture itself.					

Specific target organ toxicity (single exposure)

Code	: 00298363	Date of issue/Date of revision	: 8 May 2024
SIGMADUR	550 BASE CNC5045		

# **SECTION 11: Toxicological information**

Product/ingredient name	Category	Route of exposure	Target organs
arbons, C9, aromatics > 0.1% cumene acetate	Category 3 Category 3 Category 3 Category 3	- -	Respiratory tract irritation Narcotic effects Narcotic effects Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

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

### **Aspiration hazard**

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

# Information on likely routes : Not available. of exposure

### Potential acute health effects

Eye contact	: No known significant effects or critical hazards.
Inhalation	<ul> <li>Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.</li> </ul>
Skin contact	: Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.
Ingestion	: Can cause central nervous system (CNS) depression.

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.

# 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

English (	(GR)
Linghion	

Code : 00298363 SIGMADUR 550 BASE CNC5045	Date of issue/Date of revision	: 8 May 2024
<b>SECTION 11: Toxicological inf</b>	ormation	

Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health eff	ect	<u>s</u>
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	:	May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	No known significant effects or critical hazards.
Reproductive toxicity	1	No known significant effects or critical hazards.
Other information	:	Not available.

# **SECTION 12: Ecological information**

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Hydrocarbons, C9,	EC50 3.2 mg/l	Daphnia	48 hours
aromatics > 0.1% cumene			
	LC50 9.2 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	-
n-butyl acetate	Acute LC50 18 mg/l	Fish	96 hours
Reaction mass of bis	EC50 1.68 mg/l	Algae	72 hours
(1,2,2,6,6-pentamethyl-	C C		
4-piperidyl) sebacate and			
methyl			
1,2,2,6,6-pentamethyl-			
4-piperidyl sebacate			
	LC50 0.9 mg/l	Fish	96 hours
propylidynetrimethanol	Acute LC50 >1000 mg/l	Fish	96 hours

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
Hydrocarbons, C9, aromatics > 0.1% cumene	-	75 % - Readily -	28 days	-	-
ethylbenzene	-	79 % - Readily -	10 days	-	-
n-butyl acetate	TEPA and OECD 301D	83 % - Readily - 1		-	-
Conclusion/Summary	: Not available	).			
Product/ingredient name	Aquatic half-lif	ie	Photoly	ysis	Biodegradability
Hydrocarbons, C9, aromatics > 0.1% cumene	-		-		Readily
ethylbenzene	-		_		Readily
n-butyl acetate	-		-		Readily
xylene	-		-		Readily

### **12.3 Bioaccumulative potential**

Code	: 00298363	Date of issue/Date of revision	: 8 May 2024
SIGMADUR	550 BASE CNC5045		

### **SECTION 12: Ecological information**

Product/ingredient name	LogPow	BCF	Potential
ethylbenzene	3.6	79.43	Low
n-butyl acetate	2.3	-	Low
xylene	3.12	7.4 to 18.5	Low
propylidynetrimethanol	-0.47	-	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.

Code	: 00298363	Date of issue/Date of revision	: 8 May 2024
SIGMADUR 5	550 BASE CNC5045		

## **SECTION 14: Transport information**

		ADR/RID	ADN	IMDG	IATA
14.1 UN numbe	r U	N1263	UN1263	UN1263	UN1263
14.2 UN properPAINTshipping namePAINT		AINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es			3	3	3
14.4 Packing group			111	111	III
14.5 Environmental hazards	N	0.	Yes.	No.	No.
Marine pollutar substances	it	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Additional info	mation			•	•
ADR/RID		s class 3 viscous liqui .3.1.5.1.	id is not subject to regulat	ion in packagings up to 4	50 L according to
Funnel code	: (D/E	Ξ)			
i unner code			late de la sur sur dus uns surte	ly bazardaya aybatanca y	when transported in tank
ADN	ves	e product is only regul sels. This class 3 vis 2.2.3.1.5.1.	ated as an environmenta scous liquid is not subject		
	ves to 2	sels. This class 3 vis 2.2.3.1.5.1.		to regulation in packaging	gs up to 450 L according

### **14.7 Transport in bulk** : Not available. according to IMO instruments

### **SECTION 15: Regulatory information**

15.1 Sa	fety, health	and envir	ronmental i	regulatio	ns/leg	islation	specific	for the s	substance	e or mix	<b>kture</b>
<u>UK (G</u>	<u>B)/REACH</u>										

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 : Restricted to professional users. 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

English (GB)

Code : 00298363 SIGMADUR 550 BASE CNC5045 Date of issue/Date of revision : 8 May 2024

## **SECTION 15: Regulatory information**

### Category

P5c

## **SECTION 16: Other information**

Indicates information t	hat has changed from previously issued version.
Abbreviations and acronyms	<ul> <li>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</li> </ul>

### Procedure used to derive the classification

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Sens. 1, H317	Calculation method
Carc. 1B, H350	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

### Full text of abbreviated H statements

H225Highly flammable liquid and vapour.H226Flammable liquid and vapour.H304May be fatal if swallowed and enters airways.H312Harmful in contact with skin.H315Causes skin irritation.H317May cause an allergic skin reaction.H319Causes serious eye irritation.H332Harmful if inhaled.H335May cause respiratory irritation.		
H304May be fatal if swallowed and enters airways.H312Harmful in contact with skin.H315Causes skin irritation.H317May cause an allergic skin reaction.H319Causes serious eye irritation.H332Harmful if inhaled.H335May cause respiratory irritation.	H225	Highly flammable liquid and vapour.
H312Harmful in contact with skin.H315Causes skin irritation.H317May cause an allergic skin reaction.H319Causes serious eye irritation.H332Harmful if inhaled.H335May cause respiratory irritation.	H226	Flammable liquid and vapour.
H315Causes skin irritation.H317May cause an allergic skin reaction.H319Causes serious eye irritation.H332Harmful if inhaled.H335May cause respiratory irritation.	H304	May be fatal if swallowed and enters airways.
H317May cause an allergic skin reaction.H319Causes serious eye irritation.H332Harmful if inhaled.H335May cause respiratory irritation.	H312	Harmful in contact with skin.
H319Causes serious eye irritation.H332Harmful if inhaled.H335May cause respiratory irritation.	H315	Causes skin irritation.
H332Harmful if inhaled.H335May cause respiratory irritation.	H317	May cause an allergic skin reaction.
H335 May cause respiratory irritation.	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
H336 May cause drowsiness or dizziness.	H336	May cause drowsiness or dizziness.
H350 May cause cancer.	H350	May cause cancer.
H361f Suspected of damaging fertility.	H361f	Suspected of damaging fertility.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.	H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.	H373	May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.	H400	Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.	H410	Very toxic to aquatic life with long lasting effects.
H411 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.	H412	Harmful to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.	H413	
EUH066 Repeated exposure may cause skin dryness or cracking.	EUH066	Repeated exposure may cause skin dryness or cracking.

### Full text of classifications

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) ĂQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Aquatic Chronic 4	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Carc. 1B	CARCINOGENICITY - Category 1B
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2

English (GB)

**United Kingdom (UK)** 

Code : 00298363	Date of issue/Date of revision	: 8 May 2024
SIGMADUR 550 BASE CNC5045		

### **SECTION 16: Other information**

Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
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
<u>History</u>	
Date of issue/ Date of	: 8 May 2024
revision	
Date of previous issue	e : 14 March 2024
Prepared by	: EHS
Version	: 1.04
<b>_</b>	

### <u>Disclaimer</u>

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.