SAFETY DATA SHEET



Date of issue/Date of revision 26 April 2024

Version 1.04

Section 1. Identification	
Product code	: 00444821
Product name	: SIGMADUR 550 BASE (TINTED)
Product type	: Liquid.
Relevant identified uses o	f the substance or mixture and uses advised against
Product use	Coating. Professional applications, Used by spraying.
Supplier's details	: PPG Industries (Singapore) Pte. Ltd., No. 1 Tuas Basin Close, Singapore 638803. Tel +65 68653737
Emergency telephone number (with hours of operation)	: CHEMTREC +(65)-31581349 (CCN 17704)

Section 2. Hazards identification

Classification of the	: FLAMMABLE LIQUIDS - Category 3
substance or mixture	ACUTE TOXICITY (inhalation) - Category 4
	SKIN CORROSION/IRRITATION - Category 2
	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract
	irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

GHS label elements, including precautionary statements

Hazard pictograms	
Signal word	: Warning
Hazard statements	 Flammable liquid and vapour. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. (hearing organs)
Precautionary statements	

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Section 2. Hazards identification

Prevention	: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapour. Wash thoroughly after handling.
Response	: Get medical advice/attention if you feel unwell. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage	: Store in a well-ventilated place. Keep container tightly closed.
Disposal	: Not applicable.

result in classification

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

Section 3. Composition/information on ingredients

: Mixture

Substance/mixture

CAS number/other identifiers

CAS number	: Not applicable.
EC number	: Mixture.

Ingredient name	%	CAS number
xylene	10 - <20	1330-20-7
ethylbenzene	10 - <20	100-41-4
Talc , not containing asbestiform fibres	5 - <10	14807-96-6
n-butyl acetate	5 - <10	123-86-4
Octadecanamide, N,N'-1,6-hexanediylbis[12-hydroxy-	0.3 - <1	55349-01-4
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	0.1 - <0.3	41556-26-7
propylidynetrimethanol	0.1 - <0.3	77-99-6

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

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

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necess	sary first aid measures
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 recognised skin cleanser. Do NOT use solvents or thinners.

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Section 4. First aid measures

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Ingestion
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: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effe	<u>cts</u>
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sym	<u>ptoms</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.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO_2 , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: 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.

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Section 5. Firefighting measures

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon oxides sulfur oxides metal oxide/oxides
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

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Evacuate entering. No flares Provide a	n shall be taken involving any personal risk or without suitable training. e surrounding areas. Keep unnecessary and unprotected personnel from Do not touch or walk through spilt material. Shut off all ignition sources. I, smoking or flames in hazard area. Avoid breathing vapour or mist. adequate ventilation. Wear appropriate respirator when ventilation is ite. Put on appropriate personal protective equipment.
For emergency responders	informati	ised clothing is required to deal with the spillage, take note of any on in Section 8 on suitable and unsuitable materials. See also the on in "For non-emergency personnel".
Environmental precautions	and sewe	persal of spilt material and runoff and contact with soil, waterways, drains ers. Inform the relevant authorities if the product has caused environmental (sewers, waterways, soil or air).
Methods and material for con	nment ar	nd cleaning up
Small spill	explosior Alternativ	a if without risk. Move containers from spill area. Use spark-proof tools and n-proof equipment. Dilute with water and mop up if water-soluble. vely, or if water-insoluble, absorb with an inert dry material and place in an ate waste disposal container. Dispose of via a licensed waste disposal or.
Large spill	explosion sewers, v effluent t combusti and place Dispose material	a if without risk. Move containers from spill area. Use spark-proof tools and n-proof equipment. Approach the release from upwind. Prevent entry into water courses, basements or confined areas. Wash spillages into an reatment plant or proceed as follows. Contain and collect spillage with non- ible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth e in container for disposal according to local regulations (see Section 13). of via a licensed waste disposal contractor. Contaminated absorbent may pose the same hazard as the spilt product. Note: see Section 1 for cy contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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.
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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
xylene	Workplace Safety and Health Act (Singapore, 2/2006). [Xylene] PEL (short term): 651 mg/m ³ 15 minutes. PEL (short term): 150 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
ethylbenzene	Workplace Safety and Health Act (Singapore, 2/2006). PEL (short term): 543 mg/m ³ 15 minutes PEL (short term): 125 ppm 15 minutes. PEL (long term): 434 mg/m ³ 8 hours. PEL (long term): 100 ppm 8 hours.
Talc , not containing asbestiform fibres	Workplace Safety and Health Act (Singapore, 2/2006). PEL (long term): 2 mg/m ³ 8 hours.
n-butyl acetate	Workplace Safety and Health Act

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Section 8. Exposure controls/personal protection

		(Singapore, 2/2006). PEL (short term): 950 mg/m ³ 15 minutes. PEL (short term): 200 ppm 15 minutes. PEL (long term): 713 mg/m ³ 8 hours. PEL (long term): 150 ppm 8 hours.			
Recommended monitoring procedures	nat	Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.			
Appropriate engineering controls	ver cor also	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.			
Environmental exposure controls	the cas	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.			
Individual protection measu	<u>es</u>				
eating, smoking and using the lavatory and at the end of the work Appropriate techniques should be used to remove potentially con Wash contaminated clothing before reusing. Ensure that eyewas		ish hands, forearms and face thoroughly after handling chemical products, before ing, smoking and using the lavatory and at the end of the working period. propriate techniques should be used to remove potentially contaminated clothing. ish contaminated clothing before reusing. Ensure that eyewash stations and ety showers are close to the workstation location.			
Eye/face protection		emical splash goggles.			
Skin protection					
Hand protection	be this che sho diff sev	emical-resistant, impervious gloves complying with an approved standard should worn at all times when handling chemical products if a risk assessment indicates is is necessary. Considering the parameters specified by the glove manufacturer, eck during use that the gloves are still retaining their protective properties. It build be noted that the time to breakthrough for any glove material may be erent for different glove manufacturers. In the case of mixtures, consisting of veral substances, the protection time of the gloves cannot be accurately imated.			
Gloves	: For	prolonged or repeated handling, use the following type of gloves:			
	Not	y be used: butyl rubber t recommended: nitrile rubber commended: neoprene, natural rubber (latex), polyvinyl alcohol (PVA), Viton®			
Body protection	bei bef wea	Personal protective equipment for the body should be selected based on the task eing performed and the risks involved and should be approved by a specialist efore handling this product. When there is a risk of ignition from static electricity, year anti-static protective clothing. For the greatest protection from static ischarges, clothing should include anti-static overalls, boots and gloves.			

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Section 8. Exposure controls/personal protection

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.

Section 9. Physical and chemical properties

<u>Appearance</u>					
Physical state	:	Liquid.			
Colour	:	Various			
рН	1	insoluble in water.			
Boiling point	:	>37.78°C (>100°F)			
Flash point	:	Closed cup: 31°C (87.8°F)			
Evaporation rate	:	Highest known value: 1 (n-butyl acetate) Weighted average: 0.83compared with butyl acetate			
Flammability (solid, gas)	1	liquid			
Vapour pressure	:	Highest known value: 1.5 kPa (11.3 mm Hg) (at 20°C) (n-butyl acetate). Weighted average: 1.09 kPa (8.18 mm Hg) (at 20°C)			
Vapour density	:	Highest known value: 4 (Air = 1) (n-butyl acetate). Weighted average: 3.74 (Air = 1)			
Relative density	:	1.29			
-		Media Result			
Solubility(ies)		old water Not soluble			
Auto-ignition temperature	:	Lowest known value: 415°C (779°F) (n-butyl acetate).			
Viscosity	:	Kinematic (40°C (104°F)): >21 mm²/s (>21 cSt)			

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
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Section 10. Stability and reactivity

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
-	LD50 Oral	Rat	4.3 g/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
n-butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
-	LC50 Inhalation Vapour	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-
propylidynetrimethanol	LD50 Dermal	Rabbit	10 g/kg	-
	LD50 Oral	Rat	14000 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

Product/ingredient nam	e	Result	Species	Score	Exposure	Observation
kylene		Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Conclusion/Summary						
Skin	:	There are no data available	on the mixture	e itself.		
Eyes	1	There are no data available	on the mixture	e itself.		
Respiratory	1	There are no data available	on the mixture	e itself.		
Sensitisation						
Conclusion/Summary						
Skin	:	There are no data available	on the mixture	e itself.		
Respiratory	:	here are no data available on the mixture itself.				
<u>Mutagenicity</u>						
Conclusion/Summary	:	There are no data available	e on the mixtu	re itself.		
Carcinogenicity						
Conclusion/Summary	: There are no data available on the mixture itself.					
Reproductive toxicity						
Conclusion/Summary	: There are no data available on the mixture itself.					
Teratogenicity						
Conclusion/Summary	:	: There are no data available on the mixture itself.				
Specific target organ toxicity (single exposure)						

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation
n-butyl acetate	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes of exposure	: Not available.
Potential acute health effects	
Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation. Defatting to the skin.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phy	sical, chemical and toxicological characteristics
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.

<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u> <u>Short term exposure</u>

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Section 11. Toxicological information

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	<u>ects</u>
General	: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
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.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Inhalation (vapours)	8668.08 mg/kg 25.18 mg/l 2.92 mg/l

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 vapour/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.

Section 12. Ecological information

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Toxicity

Product/ingredient name	Result	Species	Exposure	
ethylbenzene	Acute EC50 1.8 mg/l Fresh water Chronic NOEC 1 mg/l Fresh water	Daphnia Daphnia - Ceriodaphnia dubia Fish	48 hours - 96 hours	
n-butyl acetate propylidynetrimethanol	Acute LC50 18 mg/l Acute LC50 >1000 mg/l	Fish	96 hours	
Conclusion/Summary : There are no data available on the mixture itself.				

Persistence/degradability

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Section 12. Ecological information

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Product/ingredient name	Test	Result	Dose	Inoculum	
ethylbenzene n-butyl acetate	- TEPA and OECD 301D	79 % - Readily - 10 days 83 % - Readily - 28 days	-		
Conclusion/Summary : There are no data available on the mixture itself.					
Product/ingredient name	Aquatic half-lif	fe Photo	lysis	Biodegradability	
xylene ethylbenzene	-	-		Readily Readily	

Bioaccumulative potential

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

Mobility in soil

n-butvl acetate

Soil/water partition	: Not available.
coefficient (Koc)	

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

Section 13. Disposal considerations

Disposal methods : 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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.

Section 14. Transport information

	UN	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

Additional information

UN	: None identified.
IMDG	: None identified.
IATA	: None identified.

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

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 26 April 2024
Date of previous issue	: 2/17/2022
Version	: 1.04
Prepared by	: EHS
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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 PPG, 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.