SAFETY DATA SHEET



Date of issue 15 December 2023

Version 4

Section 1. Product and company identification

Product name
Product code
Other means of identification
Product type

- : NOVAGUARD 650 BASE OFFWHITE : 00340120
- . 00340120
- : Not available.
- : Liquid.

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

Identified uses

Coating. Paints. Painting-related materials.

Uses advised against	Reason
Not applicable.	

Supplier's details:	
Supplier	 PPG Industrial do Brasil – Tintas e Vernizes Ltda Via Anhanguera KM 106, Bairro Sao Judas Tadeu Sumare / SP, Brasil 55 19 2103-6000 (Recepção e Portaria)
Email address:	: HazComLatam@ppg.com
Emergency telephone number	: 0800 707 1767 / 0800 707 7022 – Empresa Suatrans Cotec 0800 14 8110 – CEATOX - Centro de Assistência Toxicológica

Section 2. Hazards identification

Classification of the	: CUTE TOXICITY (inhalation) - Category 4
substance or mixture	SKIN IRRITATION - Category 2
	EYE IRRITATION - Category 2A
	SKIN SENSITIZATION - Category 1
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract
	irritation) - Category 3
	AQUATIC HAZARD (ACUTE) - Category 2
	AQUATIC HAZARD (LONG-TERM) - Category 2
Target organs	: Contains material which causes damage to the following organs: blood, liver, heart, brain.
	Contains material which may cause damage to the following organs: kidneys, lungs, cardiovascular system, upper respiratory tract, eyes, central nervous system (CNS).
	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 81.1%

Section 2. Hazards identification		
		Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 51.4%
GHS label elements		
Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. Toxic to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	Wear protective gloves. Wear eye or face protection. Avoid release to the environment. Avoid breathing vapor. Wash thoroughly after handling.
Response	:	Collect spillage. 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 skin irritation or rash occurs: Get medical advice or attention. 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	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other bazards which do not	۰.	None known

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

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

CAS number/other identifiers

CAS number	: Not applicable.
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Ingredient name	%	CAS number
bis-[4-(2,3-epoxipropoxi)phenyl]propane	30 - <60	1675-54-3
	30 - <60	14807-96-6
benzyl alcohol	10 - <12.5	100-51-6
titanium dioxide	3 - <5	13463-67-7

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.

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Section 3. Composition/information on ingredients

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary 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 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.
Indication of immediate me	lical attention and special treatment needed, if necessary
Notes to physician Specific treatments	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
Potential acute health effec	<u>s</u>
Eye contact Inhalation Skin contact Ingestion	 Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. No known significant effects or critical hazards.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic 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 thermal decomposition products	 Decomposition products may include the following materials: carbon 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.

Section 5. Fire-fighting measures

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 For emergency responders	:	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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. If specialized 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".
		Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
Methods and materials for co	on	tainment and cleaning up
Small spill	•	Stop leak if without risk. Move containers from spill area. 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. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling
 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. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Section 7. Handling and storage

Conditions for safe storage,	Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in
including any	accordance with local regulations. Store in original container protected from direct
incompatibilities	sunlight in a dry, cool and well-ventilated area, away from incompatible materials
	(see Section 10) and food and drink. Store locked up. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name			Exposure limits		
▼alc , not containing asbestiform fibres			ACGIH TLV (United States, 1/2023). TWA: 2 mg/m ³ 8 hours. Form: Respirable		
titanium dioxide			ACGIH TLV (United States, 1/2023). TWA: 2.5 mg/m ³ 8 hours. Form: respirable fraction, finescale particles		
Recommended monitoring procedures	-	Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.			
Appropriate engineering controls	:	Use only with adequate ventilation. Use only with adequate ventilation. Use ventilation or other engineering contro contaminants below any recommended	ls to keep worker exposure to airborne		
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.			
Individual protection measur	<u>'es</u>				
Hygiene measures		before eating, smoking and using the Appropriate techniques should be use Contaminated work clothing should no contaminated clothing before reusing. showers are close to the workstation I	bughly after handling chemical products, lavatory and at the end of the working period. ed to remove potentially contaminated clothing. bt be allowed out of the workplace. Wash Ensure that eyewash stations and safety ocation.		
Eye protection	1	Chemical splash goggles.			
Skin protection Hand protection	:	be worn at all times when handling ch this is necessary. Considering the par check during use that the gloves are s should be noted that the time to break	s complying with an approved standard should emical products if a risk assessment indicates rameters specified by the glove manufacturer, still retaining their protective properties. It through for any glove material may be rers. In the case of mixtures, consisting of the of the gloves cannot be accurately		
Gloves	:	butyl rubber			

Section 8. Exposure controls/personal protection

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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.
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	4	Liquid.
Color	4	Off-white.
Odor	4	Characteristic.
рН	4	Not applicable.
Melting point	1	Not available.
Boiling point	1	>37.78°C (>100°F)
Flash point	1	Closed cup: 103°C (217.4°F)
Evaporation rate	1	Not available.
Flammability (solid, gas)	1	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	1	Not available.
Vapor density	1	Not available.
Relative density	4	1.55
		Media Result
Solubility(ies)	1	cold water Not soluble
Partition coefficient: n- octanol/water	:	Not applicable.
Auto-ignition temperature	1	Not available.
Decomposition temperature	1	Not available.
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.

Section 10. Stability and reactivity

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: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Depending on conditions, decomposition products may include the following materials carbon oxides metal oxide/oxides

Section 11. Toxicological information

Information on toxicological effects

Acut	e to	xic	ity

Product/ingredient name	Result	Species	Dose	Exposure
øís-[4-(2,3-epoxipropoxi) phenyl]propane	LD50 Dermal	Rabbit	23000 mg/kg	-
	LD50 Oral	Rat	15000 mg/kg	-
benzyl alcohol	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m ³	4 hours
-	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1.23 g/kg	-
titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

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

Observation Product/ingredient name Result **Species** Score **Exposure** bis-[4-(2,3-epoxipropoxi) 24 hours Eyes - Mild irritant Rabbit phenyl]propane Eyes - Redness of the Rabbit 0.4 24 hours conjunctivae Skin - Edema Rabbit 0.5 4 hours Skin - Erythema/Eschar Rabbit 0.8 4 hours _ Skin - Mild irritant Rabbit 4 hours

Conclusion/Summary

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

: There are no data available on the mixture itself.

Eyes Respiratory

: There are no data available on the mixture itself.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
pis-[4-(2,3-epoxipropoxi) phenyl]propane	skin	Mouse	Sensitizing
Conclusion/Summary		•	·

Skin

Respiratory

There are no data available on the mixture itself.
There are no data available on the mixture itself.

Mutagenicity

Not available.

Date of issue

Section 11. Toxicological information

Conclusion/Summary

: There are no data available on the mixture itself.

Carcinogenicity

Not available.

Conclusion/Summary

: There are no data available on the mixture itself.

Classification

Product/ingredient name	OSHA	IARC	NTP
₱s-[4-(2,3-epoxipropoxi) phenyl]propane	-	3	-
titanium dioxide	-	2B	-

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4 NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen OSHA: + Not listed/not regulated: -

Reproductive toxicity

Not available.

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

Teratogenicity

Not available.

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

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Target organs

: Contains material which causes damage to the following organs: blood, liver, heart, brain.

Contains material which may cause damage to the following organs: kidneys, lungs, cardiovascular system, upper respiratory tract, eyes, central nervous system (CNS).

Aspiration hazard

Name	Result
benzyl alcohol	ASPIRATION HAZARD - Category 2

Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	1	Causes serious eye irritation.
Inhalation	;	Harmful if inhaled. May cause respiratory irritation.

Symptoms related to the physical, 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
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary	: There are no data available on the mixture itself. For many products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.
Short term exposure	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Long term exposure	
Potential immediate effects	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Potential chronic health effe	ects
Not available.	
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Section 11. Toxicological information

Carcinogenicity
Mutagenicity
Poproductive toxic

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

Numerical measures of toxicity

Acute toxicity estimates

	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
₩OVAGUARD 650 BASE OFFWHITE	10939.7	10649.3	N/A	N/A	2.5
bis-[4-(2,3-epoxipropoxi)phenyl]propane	15000	23000	N/A	N/A	N/A
benzyl alcohol	1230	2000	N/A	N/A	1.5

Other information

: Not available.

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
bis-[4-(2,3-epoxipropoxi) Acute LC50 1.8 mg/l Fresh water phenyl]propane		Daphnia - <i>daphnia magna</i>	48 hours
titanium dioxide	Chronic NOEC 0.3 mg/l Acute LC50 >100 mg/l Fresh water	Daphnia Daphnia - <i>Daphnia magna</i>	21 days 48 hours

Persistence/degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
øs-[4-(2,3-epoxipropoxi) phenyl]propane	-	-	Not readily
benzyl alcohol	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
enzyl alcohol	0.87	-	Low

Mobility in soil

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

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

Section 13. Disposal considerations

Disposal methods

: 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. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	Brazil (ANTT)	IMDG	IATA	
UN number	UN3082	UN3082	UN3082	UN3082	
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4- (2,3-epoxipropoxi)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4- (2,3-epoxipropoxi)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4- (2,3-epoxipropoxi)	ARDOUS STANCE, D, N.O.S. bis-[4- oxipropoxi) HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4- (2,3-epoxipropoxi)	
	phenyl]propane)	phenyl]propane)	phenyl]propane)	phenyl]propane)	
Transport hazard class(es)	9	9	9	9	
Packing group	III	III	III	III	
Environmental hazards	Yes.	Yes.	Yes.	Yes.	
Marine pollutant substances	Not applicable.	Not applicable.	(bis-[4- (2,3-epoxipropoxi) phenyl]propane)	Not applicable.	

Additional information

UN	: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Brazil	: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Risk number	: 90
IMDG	: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
ΙΑΤΑ	: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
	• <u> </u>

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.

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Section 14. Transport information

Transport in bulk according : Not applicable. to IMO instruments

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

<u>History</u>	
Date of previous issue	: 1/9/2023
Version	: 4
	EHS
Key to abbreviations	 ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association 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) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations
Deferreres	
References	: ABNT NBR 14725-4: 2014 ANTT - National Land Transportation Agency

Indicates information that has changed from previously issued version.

<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 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.