W-POXI BLOCK ADA 40 COMPONENT B

Safety Data Sheet

According to ABNT NBR 14725: 2023
Issue date: 2/9/2024 Revision date: 5/16/2025 Version: 4.0

SECTION 1: Identification

1.1. GHS Product identifier

Product form	:	Mixture
Trade name	:	W-POXI BLOCK ADA 40 COMPONENT B
Product code	:	11969496
Type of product	:	Catalyst
Product group	:	Trade product

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Uses in coatings - Curing agent for component A.

1.4. Supplier's details

WEG TINTAS LTDA - GRUPO WEG

Guaramirim - Santa Catarina / Brasil
Rodovia BR 280 – Km 50, 6.918 – Bloco A. Caixa D'Água – 89270-000 - +55 (47) 3276-4000

Mauá - São Paulo / Brasil
Rua Dr. Ulysses Guimarães, nº 918 – Bloco A. Loteamento Industrial Coral 09372-050 – Fone: +55 (11) 4547-6100

Cabo de Santo Agostinho - Pernambuco / Brasil
Via VII, 314 Distrito Industrial DIPER – 54590-000 - Fone: +55 (81) 3512-3000

Betim - Minas Gerais / Brasil
Avenida Juiz Marco Tulio Isaac, 2994 Betim Industrial – 32671-198, Fone: +55 (31) 3268-0687 / +55 (31) 3268-0686

Macaé - Rio de Janeiro / Brasil
Rua Itacolomi, 528 – Quadra H – Lote 11 Cabiúnas – 27977-340

Atotonilco de Tula - Estado de Hidalgo / México
Av. Hidalgo, lote 40, 41, 42 y 43 - Parque Industrial Bicentenario, CP 42980 - Fone: +52 (55) 5321-4231

Buenos Aires - Provincia de Buenos Aires / Argentina
Av. José Melián, 2983 - Parque Industrial Burzaco, B1852 - Fone: +54 (11) 4299-8000

1.5. Emergency phone number

Emergency number :

24-HOUR EMERGENCY - AMBIPAR 0800 117 2020

CHEMTREC international number +1-703-527-3887 e 1-800-424-9300

Country	City	Local Number	Toll-Free Number
Austria	Vienna	+43-1-3649237	
Austria			0800 293702
China		400 120 4937	
France		+33-975181407	
Germany			0800-181-7059

India	Bangalore	+91 8071 279 207	
India			000 800 1007 141
Italy	Milan	+39-02 4555 7031	
Italy			800 789 767
Netherlands		+31-85 888 0596	
Russia			8(800)100-63-46
South Africa			080-001-4676
United Kingdom	London	+44 20 3807 3798	
South korea			080-880-0454
Japan			0800-300-5842

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to GHS BR (ABNT NBR 14725: 2023)

Flammable liquids, Category 3
Acute toxicity (oral), Category 4
Skin corrosion/irritation, Category 1C
Skin sensitisation, Category 1
Specific target organ toxicity — Single exposure, Category 3, Narcosis
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
Specific target organ toxicity — Repeated exposure, Category 2

2.2. GHS Label elements, including precautionary statements

GHS BR labelling

Hazard pictograms (GHS BR) :

Signal word (GHS BR) : Danger

Hazard statements (GHS BR) : H226 - Flammable liquid and vapour
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS BR) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.
P260 - Do not breathe dust, fume, gas, mist, vapours or spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, eye protection, face protection and hearing protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or a doctor if you feel unwell.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or a doctor.
P312 - Call a POISON CENTER or a doctor if you feel unwell.
P314 - Get medical advice or attention as appropriate.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use appropriate media to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and international regulations.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	GHS Product identifier	%	Classification according to GHS BR (ABNT NBR 14725: 2023)
SOLVENT BUTANOL	CAS-No.: 71-36-3	20 – 40	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335
FORMALDEHYDE, POLYMER WITH BENZENEAMINE, HYDROGENATED	CAS-No.: 135108-88-2	10 – 20	Acute Tox. 3 (Oral), H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Chronic 3, H412
HARDENER EPOXY	CAS-No.: 111-40-0	5 – 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1, H317
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	CAS-No.: 90-72-2	5 – 10	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
TRIETHYLENETETRAMINE	CAS-No.: 112-24-3	1 – 5	Acute Tox. 4 (Dermal), H312

Name	GHS Product identifier	%	Classification according to GHS BR (ABNT NBR 14725: 2023)
			Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Seek medical attention immediately. People with over sensibility problems are not allowed to work or be exposed to the product.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Give oxygen or artificial respiration if necessary.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. Be careful, the product may remain trapped under clothing, footwear or a wrist-watch. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting because of corrosive effects.

4.2. Most important symptoms and effects, acute and delayed

Symptoms/effects : May cause damage to organs through prolonged or repeated exposure. Swallowing a small quantity of this material presents some health hazard. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms/effects after inhalation : May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

Symptoms/effects after skin contact : Highly corrosive to skin. Causes severe burns. irritation (itching, redness, blistering). Cracking of the skin.

Symptoms/effects after eye contact : stinging. Redness. Causes serious eye burns. redness, itching, tears.

Symptoms/effects after ingestion : Harmful if swallowed. Ingestion may cause nausea and vomiting. Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

4.3. Indication of any immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Dry chemical, CO_2, or water spray or regular foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapour. The vapours are denser than air and may travel along the ground. Distance ignition possible. Agitation can cause build up of electrostatic charge. Vapours may cause fire/explosion if source of ignition is present. In case of fire and/or explosion do not breathe fumes. In case of fire, corrosive gases come free.

Explosion hazard : Vapours may form explosive mixture with air. Prolonged exposure to fire may cause containers to rupture/explode.

5.3. Special protective actions for fire-fighters

Precautionary measures fire : Keep container closed when not in use. This product is not to be used under conditions of poor ventilation.

Firefighting instructions : Get the package away from the fire if this can be done without risk. Fight fire from a safe distance or use hoses with support or cannon engine. Cool laterally with water containers exposed to flames, even after the fire is extinguished. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

Other information : In case of fire, corrosive and harmful gases come free.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Eliminate every possible source of ignition. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Avoid contact with skin and eyes. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : No flames, no sparks. Eliminate all sources of ignition. Do not touch or walk on the spilled product. Evacuate area. Only qualified personnel equipped with suitable protective equipment may intervene. Notify fire brigade and environmental authorities.

6.1.2. For emergency responders

Protective equipment : Use self-contained breathing apparatus and chemically protective clothing. Gloves. Wear security glasses which protect from splashes. Self-contained breathing apparatus. Total impervious protective suits, gloves, and boots must be worn to prevent any contact with the product. Corrosionproof suit. Equip cleanup crew with proper protection.

Emergency procedures : Keep away from combustible material. All equipment used when handling the product must be grounded. Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Notify authorities if product enters sewers or public waters.

6.3. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Absorb remaining liquid with sand or inert absorbent and remove to safe place. Clean contaminated surfaces with an excess of water. Absorb spillage to prevent material damage. Absorb spilled material with sand or earth.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Flammable vapours may accumulate in the container.

Precautions for safe handling : Provide adequate ventilation to minimize dust and/or vapour concentrations. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Handle carefully. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear personal protective equipment. Do not eat, drink or smoke when using this product. When heated, material emits highly irritating vapours, affecting the eyes. Do not get in eyes, on skin, or on clothing. Contaminated work clothing should not be allowed out of the workplace. Keep only in

		original container. Do not handle until all safety precautions have been read and understood.
Hygiene measures	:	Always wash hands after handling the product. Take off immediately all contaminated clothing and wash it before reuse. Remove contaminated clothes. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Ensure adequate ventilation, especially in confined areas. Store locked up.
Storage conditions	:	Keep cool. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Protect from sunlight.
Incompatible materials	:	combustible materials.
Packaging materials	:	Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

HARDENER EPOXY 111-40-0	
USA - ACGIH - Occupational Exposure Limits	
Local name	Diethylenetriamine
ACGIH® TLV® TWA	1 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr. Notations: Skin
Regulatory reference	ACGIH 2024

SOLVENT BUTANOL 71-36-3	
USA - ACGIH - Occupational Exposure Limits	
Local name	n-Butanol
ACGIH® TLV® TWA	20 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	n-Butyl alcohol
OSHA PEL TWA	300 mg/m³
	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls	:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures

Personal protective equipment:
Corrosionproof clothing.

Hand protection:
Protective gloves made of PVC. Nitrile rubber gloves

Eye protection:
Wear closed safety glasses

Skin and body protection:
Safety shoes. Long sleeved protective clothing. Or chemical resistant apron

Respiratory protection:
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Colour	:	Colourless
Odour	:	characteristic
Odour threshold	:	Not available
pH	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flash point	:	30 °C
Relative evaporation rate (butylacetate=1)	:	Not available
Flammability	:	Not available
Explosive limits	:	Not available
Vapour pressure	:	Not available
Relative vapour density at 20°C	:	Not available
Relative density	:	Not available
Density	:	0.91 – 1.01 g/cm³
Solubility	:	Material insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
Viscosity, kinematic	:	Not available
Particle size	:	Not applicable
Particle size distribution	:	Not applicable
Particle shape	:	Not applicable
Particle aspect ratio	:	Not applicable
Particle specific surface area	:	Not applicable

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL90-72-2	
Flash point	148 °C

FORMALDEHYDE, POLYMER WITH BENZENEAMINE, HYDROGENATED135108-88-2	
Boiling point	220 °C
Flash point	> 200 °C
Vapour pressure	0.055 Pa

SOLVENT BUTANOL71-36-3	
Flash point	36 °C

9.2. Data relevant with regard to physical hazard classes

No additional information available

9.3. Further safety characteristics

No additional information available

SECTION 10: Stability and reactivity

Chemical stability : In use may form flammable/explosive vapour-air mixture.
Conditions to avoid : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with hot surfaces. High temperature. Avoid formation of vapours.
Hazardous decomposition products : May liberate toxic gases. On exposure to high temperature, may decompose, releasing corrosive gases.
Incompatible materials : Combustible materials.
Possibility of hazardous reactions : Liquids/vapours may ignite or react with other materials.
Reactivity : The product is non-reactive under normal conditions of use, storage and transport.
Handling temperature : No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not available
Acute toxicity (inhalation) : Not available

W-POXI BLOCK ADA 40 COMPONENT B	
ATE BR (oral)	404.249 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns.

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (90-72-2)	
pH	11

HARDENER EPOXY (111-40-0)	
pH	12

Serious eye damage/irritation : Assumed to cause serious eye damage

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (90-72-2)	
pH	11

HARDENER EPOXY (111-40-0)	
pH	12

Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not available

Carcinogenicity : Not available
Reproductive toxicity : Not available
STOT-single exposure : May cause drowsiness or dizziness. May cause respiratory irritation.

SOLVENT BUTANOL (71-36-3)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

FORMALDEHYDE, POLYMER WITH BENZENEAMINE, HYDROGENATED (135108-88-2)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not available

11.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : May cause damage to organs through prolonged or repeated exposure. Swallowing a small quantity of this material presents some health hazard. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness.
Symptoms/effects after inhalation : May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.
Symptoms/effects after skin contact : Highly corrosive to skin. Causes severe burns. irritation (itching, redness, blistering). Cracking of the skin.
Symptoms/effects after eye contact : stinging. Redness. Causes serious eye burns. redness, itching, tears.
Symptoms/effects after ingestion : Harmful if swallowed. Ingestion may cause nausea and vomiting. Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not available
Hazardous to the aquatic environment, long–term (chronic) : Not classified.

FORMALDEHYDE, POLYMER WITH BENZENEAMINE, HYDROGENATED135108-88-2	
LC50 - Fish [1]	63 mg/l
EC50 - Crustacea [1]	15.4 mg/l
EC50 72h - Algae [1]	43.9 mg/l

12.2. Persistence and degradability

W-POXI BLOCK ADA 40 COMPONENT B	
Persistence and degradability	Not rapidly degradable

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL90-72-2	
Persistence and degradability	Not rapidly degradable

HARDENER EPOXY111-40-0	
Persistence and degradability	Not rapidly degradable

FORMALDEHYDE, POLYMER WITH BENZENEAMINE, HYDROGENATED135108-88-2	
Persistence and degradability	Not rapidly degradable

TRIETHYLENETETRAMINE112-24-3	
Persistence and degradability	Not rapidly degradable

SOLVENT BUTANOL71-36-3	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Hazardous to the ozone layer : Not available

Other adverse effects : May cause pH changes in aqueous ecological systems. Before neutralisation, the product may represent a danger to aquatic organisms.

SECTION 13: Disposal considerations

Regional waste regulation : Law No. 12.305 on the National Policy on Solid Waste Management, 02 August 2010.

Waste treatment methods : Must follow special treatment according to local regulation.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

Additional information : Flammable vapours may accumulate in the container. Do not re-use empty containers.

SECTION 14: Transport information

14.1 National and international Regulations

In accordance with IMDG / IATA / ANTT

ANTT	IMDG	IATA
UN number		
1263	1263	1263
UN Proper Shipping Name		
MATERIAL RELACIONADO COM TINTAS	PAINT RELATED MATERIAL	Paint related material
Transport document description		
Not applicable	UN 1263 PAINT RELATED MATERIAL, 3, III (30°C c.c.)	UN 1263 Paint related material, 3, III
Transport hazard class(es)		
3	3	3
Danger labels		
3	3	3

Subsidiary risk		
Not applicable	Not applicable	Not applicable
Risk Number		
30	Not applicable	Not applicable
Packing group		
III	III	III
Special provisions		
163,223,367	163,223,367,955	A3,A72,A192
Dangerous for the environment		
No	No	No

14.2 Other informations

No additional information available

SECTION 15: Regulatory information

15.1. National regulations

Brazil Local Regulations : Standard ABNT NBR 14725.
Federal Decree no. 10.088, of 5 November 2019 – Promulgates Convention no. 170 of the WLO, relating to Safety in the Use of Chemicals in the Workplace, ratified by the Federative Republic of Brazil.
Ministerial Order no. 2.770, of 5 September 2022 – Approves the new wording of Regulatory Standard No. 26
Federal Decree no. 96.044, of 18 May 1988 - Approves Regulations for Road Transportation of Hazardous Materials
Resolution no. 5998, of November 3, 2022, updates the regulation for road transport of dangerous goods, approves its Complementary Instructions, and other measures.

SECTION 16: Other information

Abbreviations and acronyms : CAS-No. - Chemical Abstract Service number
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF - Bioconcentration factor
EC50 - Median effective concentration
LC50 - Median lethal concentration
VOC - Volatile Organic Compounds
LD50 - Median lethal dose
DMEL - Derived Minimal Effect level
DNEL - Derived-No Effect Level
COD - Chemical oxygen demand (COD)
ATE - Acute Toxicity Estimate
IMDG - International Maritime Dangerous Goods
IATA - International Air Transport Association
EC-No. - European Community number
vPvB - Very Persistent and Very Bioaccumulative
WGK - Water Hazard Class
IOELV - Indicative Occupational Exposure Limit Value
BLV - Biological limit value

TRGS - Technical Rules for Hazardous Substances
TLM - Median Tolerance Limit
IARC - International Agency for Research on Cancer

Important information, but not specifically described in the previous sections: This MSDS was prepared based on current knowledge about the handling of the product under normal conditions of use, according to the application specified on the packaging and recommended usage in Section 1 of this MSDS. Any other use of the product involving its combination with other materials, as well as forms of use different from those indicated, are the user's responsibility. The company advises that the handling of any chemical substance requires prior knowledge of its hazards by the user. In the workplace it is responsibility of the company user of the product to provide training of its employees and contractors about the possible risks arising from exposure to the chemical. We reserve the right to change the information contained in this document without prior notice, due to the improvement and continuous evolution of the product and technical knowledge.