

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. <u>Product identifier:</u>

A.Z. Meisterteile de-icer

1.2. Relevant identified uses of the mixture and uses advised against:

Maintenance product. For industrial, consumer and professional use. Uses advised against: Uses other than the recommended uses.

1.3. <u>Details of the supplier of the safety data sheet:</u>

Information about the distributor:

Unix Autó Kft.

1139 Budapest, Frangepán utca 55-57.

Tel.: 00 36 1 270 8700

1.3.1. Responsible person:

E-mail: info@unixauto.hu

1.4. Emergency telephone number: Please fill in!

SECTION 2: HAZARDS IDENTIFICATION

2.1. <u>Classification of the mixture:</u>

Classification according to Regulation (EC) No 1272/2008 (CLP):

Flammable liquids, Hazard Category 2 – H225

Acute toxicity (oral), Hazard Category 4 – H₃02

Specific target organ toxicity – Repeated exposure, Hazard Category 2 – H₃₇₃

Hazard statements:

H225 – Highly flammable liquid and vapour.

H302 – Harmful if swallowed.

H₃₇₃ – May cause damage to organs (kidney) through prolonged or repeated exposure.

2.2. <u>Label elements:</u>

Components that define the hazards: Ethylene glycol







Hazard statements:

H225 – Highly flammable liquid and vapour.

H302 – Harmful if swallowed.

H₃₇₃ – May cause damage to organs (kidney) through prolonged or repeated exposure.

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Precautionary statements:

P102 – Keep out of reach of children.

P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P264 – Wash contaminated skin thoroughly after handling.

P270 – Do not eat, drink or smoke when using this product.

P273 – Avoid release to the environment.

P314 – Get medical advice/attention if you feel unwell.

P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P₃₃₀ – Rinse mouth.

P304 + P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P501 – Dispose of contents/container as hazardous waste, in accordance with local/national/international regulations.

2.3. Other hazards:

The product has no other known specific hazards for human or environment.

The product does not contain PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances:

Not applicable.

3.2. Mixtures:

Description: Mixture of substances listed below with non-hazardous additives:

	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation (EC) No 1272/2008 (CLP)		
Description					Pictogram, signal word code(s)	Hazard class and category code(s)	Hazard statement code(s)
Ethyl alcohol* Index number: 603-002-00-5	64-17-5	200-578-6	01- 2119457610-43	60-70	GHS02 Danger	Flam. Liq. 2	H225
Ethylene glycol*/** Index number: 603-027-00-1	107-21-1	203-473-3	01- 2119456816-28	15-20	GHS07 GHS08 Warning	Acute Tox. 4 STOT RE 2	H302 H373 (kidney)
ENI Antifreeze mixture:							
Ethylene glycol*/** Index number: 603-027-00-1	107-21-1	203-473-3	01- 2119456816-28		GHS07 GHS08 Warning	Acute Tox. 4 STOT RE 2	H302 H373 (kidney)
Disodium tetraborate pentahydrate Index number: 005-011-02-9	12179-04-3	215-540-4	-	8-10	GHSo8 Danger	Repr. 1B	H ₃ 6oFD

^{*:} Substance having occupational exposure limit value.

Specific concentration limits:

Disodium tetraborate pentahydrate (CAS: 12179-04-3):

Repr. 1B; H₃6oFD: C ≥ 6.5%

For the full text of hazard statements, see Section 16.

^{**:} Classification specified by the manufacturer that includes other classification in addition to the classification specified by Regulation (EC) No 1272/2008.

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SECTION 4: FIRST AID MEASURES

4.1. <u>Description of first aid measures:</u>

General information:

Provide fresh air. Consult a physician in case of symptoms, complaints or if in doubt. In case of unwellness, obtain medical attention. Do not give anything orally to an unconscious person.

INGESTION:

Measures:

- Do not induce vomiting!
- Immediately call for a physician and show him the safety data sheet or the product's label.

INHALATION:

Measures:

- Take the victim into fresh air and place him into a position that is comfortable for breathing.
- Immediately call a physician is coughing or unwellness occur.

SKIN CONTACT:

Measures:

- Remove the contaminated clothes and shoes.
- Wash contaminated skin with plenty of water and soap.
- Obtain medical attention if complaints or irritation occur.

EYE CONTACT:

Measures:

- Rinse eye for at least 10-15 minutes with plenty of running water, while holding eyelids apart and moving the
- Remove contact lenses if present, and if this is easy to do.
- Continue rinsing.
- Obtain medical attention if irritation occurs.

4.2. <u>Most important symptoms and effects, both acute and delayed:</u>

In case of ingestion, nausea and vomiting may occur. The ingestion of larger quantities may cause kidney damage. Effects may occur delayed.

Inhalation of larger quantity of the vapours may cause respiratory irritation.

4.3. <u>Indication of any immediate medical attention and special treatment needed:</u>

No special treatment needed; treat symptomatically.

Keep patient under observation.

Immediate medical attention is required in case of ingestion (before the symptoms occur).

Show this safety data sheet or the product's label to the physician.

SECTION 5: FIREFIGHTING MEASURES

5.1. <u>Extinguishing media:</u>

5.1.1. Suitable extinguishing media:

Water spray, extinguishing powder, alcohol-resistant foam, carbon dioxide.

5.1.2. Unsuitable extinguishing media:

Do not use strong water jet.

5.2. <u>Special hazards arising from the substance or mixture:</u>

Highly flammable liquid and vapour.

In case of fire, smoke and other combustion products (carbon monoxide, carbon dioxide) may be formed; the inhalation of such combustion products can have serious adverse effects on health.

5.3. Advice for firefighters:

Wear full protective clothing and self-contained breathing apparatus.

Evacuate the surroundings.

Stop the leakage.

Prevent the extinguishing agent from entering sewers, bodies of water or the environment.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

6.1.1. For non-emergency personnel:

Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. For emergency responders:

Stop leakage if this can be done without risk.

Remove all sources of ignition and do not use open flames.

Observe the pertinent regulations on industrial safety and basic hygiene rules.

Prevent product from getting into contact with skin and eyes.

Do not breathe vapour or spray.

As emergency responder, wear suitable personal protection.

Provide adequate ventilation in the danger zone.

6.2. <u>Environmental precautions:</u>

Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

6.3. Methods and material for containment and cleaning up:

Stop leakage if this can be done without risk.

Close down the danger zone and deny entry to unauthorized persons.

Collect spilled material with non-combustible absorbent material (e.g. dry earth, sand) and place into closed containers until proper removal.

6.4. Reference to other sections:

For further and detailed information see Sections 7, 8, 13 and 15.

SECTION 7: HANDLING AND STORAGE

7.1. <u>Precautions for safe handling:</u>

Observe conventional hygiene precautions.

Observe the pertinent regulations on industrial safety and basic hygiene rules.

Avoid ingestion of the product, its contact with skin and eyes, and the inhalation of its vapours.

Do not eat or drink during use.

Remove contaminated clothes and wash them before re-use.

Wash hands with soap and running water during breaks and at the end of work.

Technical measures:

Use only in a well-ventilated place.

Prevent accumulation of vapours in the air.

Use appropriate personal protection.

Precautions against fire and explosion:

Highly flammable liquid and vapour.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take measures to prevent electrostatic charges.

7.2. <u>Conditions for safe storage, including any incompatibilities:</u>

Technical measures and storage condition:

Store in a well-ventilated, cool and dry place.

Smoking is prohibited in the storage area.

 $Provide\ solvent-resistant\ floors.$

Protect from moisture.

Do not store together with strong oxidizing agents.

Store separated from food, beverages and animal feed.

Keep out of the reach of children.

Incompatible materials: See Section 10.5

Packaging material: No special prescriptions.

7.3. Specific end use(s):

See Section 1.2.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. <u>Control parameters:</u>

Occupational exposure limit values (United Kingdom, EH40/2005 (Fourth Edition 2020)):

Ethyl alcohol (CAS: 64-17-5):

Long-term exposure limit (8-hr TWA reference period): 1000 ppm; 1920 mg/m³

Ethylene glycol (CAS: 107-21-1):

Particulate:

Long-term exposure limit (8-hr TWA reference period): 10 mg/m³

Vapour:

Long-term exposure limit (8-hr TWA reference period): 20 ppm; 52 mg/m³ Short-term exposure limit (15-minute reference period): 40 ppm; 104 mg/m³

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data

PNEC values				
Compartment	Value	Note(s)		
Freshwater	no data	no notes		
Marine water	no data	no notes		
Freshwater sediment	no data	no notes		
Marine water sediment	no data	no notes		
Sewage Treatment Plant (STP)	no data	no notes		
Intermittent release	no data	no notes		
Secondary poisoning	no data	no notes		
Soil	no data	no notes		

8.2. Exposure controls:

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1. Appropriate engineering controls:

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin. Use the product with adequate ventilation.

8.2.2. Individual protection measures, such as personal protective equipment:

Observe the general safety regulations when handling chemicals.

Observe the pertinent regulations on industrial safety and basic hygiene rules.

Do not eat or drink during use.

Do not smoke!

Prevent product from getting into contact with skin and eyes.

Do not breathe aerosol.

Remove contaminated clothes and wash them before re-use.

Wash hands with soap and running water during breaks and at the end of work.

Wash hands before eating.

See also Sections 6-7.

The information regarding personal protective equipment is only for informative purposes. A complete risk assessment is required before the use of the product for the determination of the appropriate personal protective equipment, taking local circumstances into account.

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- Eye/face protection: If eye contact is possible, use appropriate protective glasses (EN 166).
- Skin protection:
 - Hand protection: Use appropriate protective gloves (EN 374).

The glove material should be impermeable and resistant to the product.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which may vary from manufacturer to manufacturer.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Remove contaminated gloves and wash before re-use.

- Other: Use appropriate protective clothing in case of continuous use.
- Respiratory protection: Use appropriate respiratory protective device if exposure limit values are exceeded.
- Thermal hazards: No thermal hazards known.

Environmental exposure controls: 8.2.3.

Do not let the product into sewers, bodies of water and the environment.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties: 9.1.

	Parameter	Value / Test method / Remarks
1.	Appearance:	colourless liquid
2.	Odour:	characteristic, alcoholic odour
3.	Odour threshold:	no data*
4.	pH:	7.7 (20 °C)
5.	Melting point/freezing point:	no data*
6.	Initial boiling point and boiling range:	no data*
7.	Flash point:	no data*
8.	Evaporation rate:	no data*
9.	Flammability (solid, gas):	highly flammable liquid and vapour
10.	Upper/lower flammability or explosive limits:	no data*
11.	Vapour pressure:	no data*
12.	Vapour density:	no data*
13.	Relative density:	no data*
14.	Solubility(ies):	miscible with water
15.	Partition coefficient: n-octanol/water:	no data*
16.	Auto-ignition temperature:	no data*
17.	Decomposition temperature:	no data*
18.	Viscosity:	no data*
19.	Explosive properties:	no data*
20.	Oxidizing properties:	no data*

Other information: 9.2.

Density at 20 °C: 0.96 g/cm³

*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet.

SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity:**

No reactivity known if stored and used as prescribed.

Chemical stability: 10.2.

Stable if stored and used as prescribed.

Possibility of hazardous reactions: 10.3.

No hazardous reactions occur under normal conditions.

Conditions to avoid: 10.4.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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10.5. <u>Incompatible materials:</u>

Strong oxidizing agents, strong acids, bases.

10.6. <u>Hazardous decomposition products:</u>

No hazardous decomposition products are known in case of normal use.

In case of fire and during incomplete burning, hazardous combustion products may be formed (see Section 5.2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. <u>Information on toxicological effects:</u>

Acute toxicity: Harmful if swallowed.

Skin corrosion/irritation: Based on available data, the classification criteria are not met. **Serious eye damage/irritation:** Based on available data, the classification criteria are not met. **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

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

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

Reproductive toxicity: Based on available data, the classification criteria are not met. **STOT-single exposure:** Based on available data, the classification criteria are not met.

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

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

11.1.1. Summaries of the information derived from the test conducted:

No data available.

11.1.2. Relevant toxicological properties:

Acute toxicity:

No toxicological data is available regarding the mixture.

Harmful if swallowed.

Irritation/Corrosion:

Skin contact: Not classified as hazardous. Eye contact: Not classified as hazardous.

STOT-repeated exposure:

Classified (May cause damage to organs (kidney) through prolonged or repeated exposure).

11.1.3. Information on likely routes of exposure:

Ingestion, inhalation, skin contact, eye contact.

11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:

In case of ingestion, nausea, vomiting may occur. The ingestion of larger quantities may cause kidney damage. Effects may occur delayed.

Inhalation of larger quantity of the vapours may cause respiratory irritation.

11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Harmful if swallowed.

May cause damage to organs (kidney) through prolonged or repeated exposure.

11.1.6. Interactive effects:

No data available.

11.1.7. Absence of specific data:

No information.

11.1.8. Other information:

No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. <u>Toxicity:</u>

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

12.2. <u>Persistence and degradability:</u>

No data available.

12.3. <u>Bioaccumulation potential:</u>

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No data available.

12.4. Mobility in soil:

The mineral oil floats on water, adsorbs into the soil particulates and loses its mobility.

12.5. Results of PBT and vPvB assessment:

The product does not contain PBT or vPvB substances.

12.6. Other adverse effects:

Do not let into the sewage system, sewers, soil, ground water or bodies of water.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:

Disposal according to the local regulations.

13.1.1. Information regarding the disposal of the product:

Dispose of in accordance with applicable regulations.

Do not dispose of together with household waste.

List of Waste Code:

14 06 03* other solvents and solvent mixtures

*: Hazardous waste.

13.1.2. Information regarding the disposal of the packaging:

Dispose of in accordance with applicable regulations.

Packaging waste is hazardous.

Do not let the packaging in sewers or water courses.

13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:

No data available.

13.1.4. Sewage disposal:

No data available.

13.1.5. Special precautions for any recommended waste treatment:

No data available.

SECTION 14: TRANSPORT INFORMATION

14.1. UN Number:

ADR/RID: UN 1993

14.2. <u>UN proper shipping name:</u>

ADR/RID: FLAMMABLE LIQUID, N.O.S.

14.3. <u>Transport hazard class(es):</u>

Class: 3

Classification code: F1

Label: 30

14.4. Packing group:

ADR/RID: III

14.5. <u>Environmental hazards:</u>

Environmentally hazardous: No.

Marine pollutant: No.

14.6. <u>Special precautions for user:</u>

See Sections 6-8.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code:

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. <u>Safety, health and environmental regulations/legislation specific for the substance or mixture:</u>

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No

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1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No 91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006

COMMISSION REGULATION (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

The product contains an ingredient which is contained in Annex XVII of Regulation (EC) No 1907/2006, therefore it is subject to restriction:

entry 30 - Toxic to reproduction - Disodium tetraborate pentahydrate (CAS: 12179-04-3)

Contains an ingredient which is contained on the Candidate List for Substances of Very High Concern according to Regulation (EC) No 1907/2006 (REACH):

Disodium tetraborate pentahydrate (CAS: 12179-04-3)

15.2. <u>Chemical safety assessment:</u> Chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet: No information.

Literature references / data sources:

Safety data sheet issued by the manufacturer (07. 05. 2020, version 1/HU).

Methods used for the classification according to Regulation (EC) No 1272/2008:

Classification	Method	
Flammable liquids, Hazard Category 2 – H225	Based on expert judgement	
	(data provided by the manufacturer)	
Acute toxicity (oral), Hazard Category 4 – H ₃ 02	Based on calculation method	
Specific target organ toxicity – Repeated exposure, Hazard Category 2 – H ₃ 73	Based on calculation method	

Relevant hazard statements (code and full text) of Sections 2 and 3:

H225 – Highly flammable liquid and vapour.

H302 – Harmful if swallowed.

H36oFD - May damage fertility. May damage the unborn child.

H₃₇₃ – May cause damage to organs (kidney) through prolonged or repeated exposure.

Training advice: No data available.

Full text of the abbreviations in the safety data sheet:

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

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

ATE: Acute Toxicity Estimate.

AOX: Adsorbable organic halides.

BCF: Bioconcentration factor.

BOD: Biological Oxygen Demand.

 ${\sf CAS\ number:\ Chemical\ Abstract\ Service\ number.}$

CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

CMR effects: Carcinogenic, mutagenic, reprotoxic effects.

COD: Chemical Oxygen Demand.

CSA: Chemical Safety Assessment.

CSR: Chemical Safety Report.

DNEL: Derived-No-Effect-Level.

ECHA: European Chemical Agency.

EC: European Community.

EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).

EEC: European Economic Community.

EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).

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EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EN: European Norm. EU: European Union.

EWC: European Waste Catalogue (replaced by LoW – see below).

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA: International Air Transport Association.

ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods. IMSBC: International Maritime Solid Bulk Cargoes.

IUCLID: International Uniform Chemical Information Database. IUPAC: International Union of Pure and Applied Chemistry.

Kow: n-Octanol - Water Partition Coefficient.

LC50: Lethal concentration resulting in 50 % mortality.

LD50: Lethal dose resulting in 50 % mortality (median lethal dose).

LoW: List of Waste.

LOEC: Lowest Observed Effect Concentration.

LOEL: Lowest Observed Effect Level.

NOEC: No Observed Effect Concentration.

NOEL: No Observed Effect Level.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level.

OECD: Organization for Economic Cooperation and Development.

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic.

PNEC: Predicted No Effect Concentration.

QSAR: Quantitative Structure Activity Relationship.

REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

SCBA: Self Contained Breathing Apparatus.

SDS: Safety Data Sheet.

STOT: Specific Target Organ Toxicity.

SVHC: Substances of Very High Concern.

UN: United Nations.

UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials.

VOC: Volatile Organic Compound.

vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.

The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.

It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.