COCO DIAMINE



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

1.1 Product identifier

Trade name : COCO DIAMINE

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

Uses of the Substance / Mixture : Specific use(s): Emulsifier, Flotation agents, Corrosion inhibitors, Intermediate

for synthesis, Additive for industrial applications

1.3 Details of the supplier of the safety data sheet

Company : Chem International

6099 Ponders Court Greenville, SC 29615

Telephone number: 864-458-7868

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT CONTACT:

CHEMTREC 800-424-9300 within the United States and Canada

SECTION 2: Hazards identification

Although OSHA has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects.

2.1 Classification of the substance or mixture

HCS 2012 (29 CFR 1910.1200)

Acute toxicity, Category 3 H301: Toxic if swallowed.

Skin corrosion, Category 1A H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Specific target organ systemic toxicity - H373: May cause damage to organs through prolonged or repeated exposure

repeated exposure, Category 2, if swallowed.

Gastrointestinal tract

, Liver

, Respiratory Tract

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2.2 Label elements

HCS 2012 (29 CFR 1910.1200)

Pictogram





Signal Word : Danger

Hazard Statements:

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

H373 May cause damage to organs (Gastrointestinal tract, Liver, Respiratory

Tract) through prolonged or repeated exposure if swallowed.

Precautionary Statements:

Prevention

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

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

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

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

physician.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated

clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

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. Immediately call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

Storage

P310

P405 Store locked up.

Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards which do not result in classification

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Aspiration of the swallowed or vomited product can cause severe pulmonary complications.

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SECTION 3: Composition/information on ingredients

3.1 Substance

Chemical nature : Amines

Hazardous Ingredients and Impurities

Chemical Name	Identification number CAS-No.	Concentration [%]
N-Coco-1,3-Propylenediamine	61791-63-7	90 - 100
Amines, coco alkyl	61788-46-3	1 - 5

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

3.2 Mixture

Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice : Show this material safety data sheet to the doctor in attendance.

First responder needs to protect himself.

Place affected apparel in a sealed bag for subsequent decontamination.

Plan first aid action before beginning work with this product.

If inhaled : Remove to fresh air.

If breathing is difficult, give oxygen.

If breathing has stopped, apply artificial respiration.

Consult a physician.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 30

minutes.

Seek medical advice.

Remove contaminated clothing and shoes. Discard contaminated shoes and clothing.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes.

Get immediate medical advice/ attention.

Ingestion : Do not induce vomiting without medical advice.

If victim is conscious: Rinse mouth with water.

Never give anything by mouth to an unconscious person.

Keep at rest.

Do not leave the victim unattended. Vomiting may occur spontaneously

Risk of product entering the lungs on vomiting after ingestion.

Lay victim on side. Seek medical advice.

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4.2 Most important symptoms and effects, both acute and delayed

Risks : Skin contact may aggravate existing skin disease

Inhalation of product may aggravate existing chronic respiratory problems

such as asthma, emphysema or bronchitis

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : All treatments should be based on observed signs and symptoms of distress

in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Treat symptomatically.

There is no specific antidote available.

SECTION 5: Firefighting measures

Flash point : $> 212 \, ^{\circ}\text{F} \, (> 100 \, ^{\circ}\text{C})$

closed cup

Flammability class: Will burn

Autoignition temperature : no data available

Flammability / Explosive limit : no data available

5.1 Extinguishing media

Suitable extinguishing media : Water spray

Foam

Multipurpose powders Carbon dioxide (CO2)

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Under fire conditions:

Will burn

Harmful or toxic vapors are released. Container may rupture on heating. Hazardous combustion products

Nitrogen oxides (NOx)

Carbon oxides

5.3 Advice for firefighters

Special protective equipment for fire-fighters : Firefighters should wear NIOSH/MSHA approved self-contained breathing

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apparatus and full protective clothing.

Specific fire fighting methods : Cool down the containers / equipment exposed to heat with a water spray.

Ensure that there is NO direct contact between the water and the product.

Do not use a solid water stream as it may scatter and spread fire.

Collect contaminated fire extinguishing water separately. This must not be

discharged into drains.

Further information : In the event of fire and/or explosion do not breathe fumes.

Standard procedure for chemical fires.

Use a water spray to cool fully closed containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions, protective equipment

and emergency procedures

Use personal protective equipment.

Avoid contact with the skin and the eyes.

Stop the leak. Turn leaking containers leak-side up to prevent the escape of

liquid.

For personal protection see section 8.

6.2 Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Contain the spilled material by diking.

Do not allow uncontrolled discharge of product into the environment.

Spills may be reportable to the National Response Center (800-424-8802) and

to state and/or local agencies

6.3 Methods and materials for containment and cleaning up

Recovery : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder,

universal binder, sawdust). Shovel or sweep up.

Keep in suitable, closed containers for disposal. Never return spills in original containers for re-use.

Decontamination / cleaning : Clean contaminated surface thoroughly.

Wash off with plenty of water.

Recover the cleaning water for subsequent disposal.

Decontaminate tools, equipment and personal protective equipment in a

segregated area.

Disposal : Dispose of in accordance with local regulations.

Additional advice : The product should not be allowed to enter drains, water courses or the soil.

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6.4 Reference to other sections

no data available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : Provide adequate ventilation.

Advice on safe handling and usage : Avoid inhalation, ingestion and contact with skin and eyes.

Handle in accordance with good industrial hygiene and safety practice. The product must only be handled by specifically trained employees.

Hygiene measures : Personal hygiene is an important work practice exposure control measure and

the following general measures should be taken when working with or

handling this materials:

1) Do not store, use, and/or consume foods, beverages, tobacco products, or

cosmetics in areas where this material is stored.

2) Wash hands and face carefully before eating, drinking, using tobacco,

applying cosmetics, or using the toilet.

3) Wash exposed skin promptly to remove accidental splashes or contact with

material.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures for storage : Take all necessary measures to avoid accidental discharge of products into

drains and waterways due to the rupture of containers or transfer systems.

Storage conditions

Recommended : Stable under normal conditions.

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

Store in original container. Keep tightly closed.

To be avoided : Store away from heat.

Incompatible products : Do not mix with incompatible materials (See list, section 10).

Packaging Measures

Packaging materials—Recommended : Water resistant materials.

Storage stability

Storage temperature : 39 - 104 °F (4 - 40 °C)

7.3 Specific end use(s)

no data available

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SECTION 8: Exposure controls/personal protection

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Control measures

Engineering measures : Where engineering controls are indicated by use conditions or a potential for

excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures:

Effective exhaust ventilation system

Avoid splashes.

Personal protective equipment

Respiratory protection : When respirators are required, select NIOSH/MSHA approved equipment

based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Use a respirator with an approved filter if a risk assessment indicates this is

necessary.

Hand protection : Impervious gloves

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the

danger of cuts, abrasion, and the contact time.

Gloves must be inspected prior to use.

Gloves should be discarded and replaced if there is any indication of

degradation or chemical breakthrough.

Eye protection : Eye and face protection requirements will vary dependent upon work

environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended

for this material.

Eye contact should be prevented through the use of:

Safety glasses with side-shields

Face-shield

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Skin and body protection : Protective suit

Choose body protection according to the amount and concentration of the

dangerous substance at the work place.

Hygiene measures : Personal hygiene is an important work practice exposure control measure and

the following general measures should be taken when working with or

handling this materials:

1) Do not store, use, and/or consume foods, beverages, tobacco products, or

cosmetics in areas where this material is stored.

2) Wash hands and face carefully before eating, drinking, using tobacco,

applying cosmetics, or using the toilet.

3) Wash exposed skin promptly to remove accidental splashes or contact with

material.

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation

location.

The protective equipment must be selected in accordance with current local standards and in cooperation with the supplier of the protective equipment. Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use,

and the potential hazards, and/or risks that may occur during use.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

Appearance : Form: liquid

Physical state: liquid (77 °F (25 °C))

Color: light yellow to yellow

Odor : slight ammoniacal

Odor Threshold : no data available

pH : no data available

Melting point/freezing point : 59 - 86 °F (15 - 30 °C)

Boiling point/boiling range : > 572 °F (> 300 °C) (760 mmHg (1,013.25 hPa))

Flash point : > 212 °F (> 100 °C) closed cup

Flammability class: Will burn

Evaporation rate (Butylacetate = 1) : no data available

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Flammability (solid, gas) : no data available

Flammability (liquids) : no data available

Flammability / Explosive limit : no data available

Autoignition temperature : no data available

Vapor pressure : no data available

Vapor density : no data available

Density : ca. 0.85 g/cm3 (77 °F (25 °C))

Relative density: ca. 0.85 (77 °F (25 °C))

Solubility : <u>Water solubility:</u>

slightly soluble

Solubility in other solvents:

Alcohol: soluble

Partition coefficient: n-octanol/water : no data available

Thermal decomposition : no data available

Viscosity : no data available

Explosive properties : no data available

Oxidizing properties : Not considered as oxidizing., Structure-activity relationship (SAR)

9.2 Other information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Reactivity : Stable at normal ambient temperature and pressure.

10.2 Chemical stability

Chemical stability : Stable under normal conditions.

10.3 Possibility of hazardous reactions

Polymerization : Hazardous polymerization does not occur.

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10.4 Conditions to avoid

Conditions to avoid : Extremes of temperature and direct sunlight.

Keep away from heat and sources of ignition.

Decomposes on heating.

> 300 °C

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

Strong reducing agents
Strong acids and strong bases

10.6 Hazardous decomposition products

Decomposition products : On combustion or on thermal decomposition (pyrolysis), releases:

(Carbon oxides (CO + CO2)).

Nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : Toxic if swallowed.

According to the data on the components

According to the classification criteria for mixtures.

Acute inhalation toxicity : Not classified as hazardous for acute toxicity according to GHS

According to the data on the components

According to the classification criteria for mixtures.

Acute dermal toxicity : Not classified as hazardous for acute toxicity according to GHS

According to the data on the components

According to the classification criteria for mixtures.

Acute toxicity (other routes of administration) : no data available

Skin corrosion/irritation

Skin irritation : Corrosive

According to the data on the components

According to the classification criteria for mixtures.

Serious eye damage/eye irritation

Eye irritation : Risk of serious damage to eyes.

According to the data on the components

According to the classification criteria for mixtures.

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Respiratory or skin sensitization

Sensitization : no data available

Mutagenicity

Genotoxicity in vitro : According to the data on the components Product

is not considered to be genotoxic According to the

classification criteria for mixtures.

Genotoxicity in vivo : According to the data on the components Product

is not considered to be genotoxic According to the

classification criteria for mixtures.

Carcinogenicity

Carcinogenicity : no data available

This product does not contain any ingredient designated as probable or suspected human carcinogens by:

NTP

IARC

OSHA ACGIH

Toxicity for reproduction and development

Toxicity to reproduction / fertility : no data available

Developmental Toxicity/Teratogenicity : no data available

STOT

STOT-single exposure : no data available

STOT-repeated exposure : no data available

Aspiration toxicity

Aspiration toxicity : No aspiration toxicity classification

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish

N-Coco-1,3-Propylenediamine : LC50 - 96 h : 0.12 mg/l - Oncorhynchus mykiss (rainbow trout)

Very toxic to fish. Unpublished reports

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Acute toxicity to daphnia and other aquatic invertebrates.

N-Coco-1,3-Propylenediamine : EC50 - 48 h : 0.0512 mg/l - Daphnia magna (Water flea)

Very toxic to aquatic invertebrates.

Unpublished reports

Toxicity to aquatic plants

N-Coco-1,3-Propylenediamine : ErC50 - 72 h : < 1 mg/l - Algae

Very toxic to algae. Unpublished reports

Ecotoxicity assessment

Acute aquatic toxicity : According to the data on the components

Very toxic to aquatic life.

According to the classification criteria for mixtures.

Chronic aquatic toxicity : According to the data on the components

Very toxic to aquatic life with long lasting effects. According to the classification criteria for mixtures.

M-Factor

N-Coco-1,3-Propylenediamine : Acute aquatic toxicity = 10

(according to the Globally Harmonized System (GHS))

12.2 Persistence and degradability

Biodegradability

Biodegradability

N-Coco-1,3-Propylenediamine : Method: OECD Test Guideline 301 D

> 60 % - 28 d

Readily biodegradable. Unpublished reports

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

N-Coco-1,3-Propylenediamine : This substance is not considered to be persistent, bioaccumulating, and toxic

(PBT)., This substance is not considered to be very persistent and very

bioaccumulating (vPvB).

12.6 Other adverse effects

Environment assessment

N-Coco-1,3-Propylenediamine : Very toxic to aquatic life.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Advice on Disposal : Chemical additions, processing or otherwise altering this material may make

the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different

from federal laws and regulations. Consult state and local regulations

regarding the proper disposal of this material.

Waste Code : EPA

Hazardous Waste - YES

RCRA:

D002 - Corrosive waste - (C)

Advice on cleaning and disposal of packaging

Measures for waste avoidance. : Do not dispose of the product at a dump.

Advice : Empty the packaging completely prior to disposal.

Reason for waste disposal : Dispose of contents/ container to an approved waste disposal plant.

Other data : Dispose of as hazardous waste in compliance with local and national

regulations.

SECTION 14: Transport information

Transportation status: IMPORTANT! Statements below provide additional data on listed transport classification.

The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

DOT

14.1 UN number UN 2922

<u>14.2 Dangerous Good Description</u> UN 2922 CORROSIVE LIQUIDS, TOXIC, N.O.S. (N-COCO-1,3-

PROPYLENEDIAMINE, COCO ALKYL AMINES), 8 (6.1), II

14.3 Transport hazard class8Subsidiary hazard class6.1

14.4 Packing group

Packing group II Label(s) 8 (6.1) ERG No 154

14.5 Environmental hazards YES

Marine pollutant

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TDG

14.1 UN number UN 2922

14.2 Dangerous Good Description UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (N-COCO-1,3-

PROPYLENEDIAMINE, COCO ALKYL AMINES), 8 (6.1), II

14.3 Transport hazard class 8

Subsidiary hazard class 6.1

14.4 Packing group

Packing group II

Label(s) 8 (6.1) ERG No 154

14.5 Environmental hazards YES

Marine pollutant

IMDG

14.1 UN number UN 2922

14.2 Dangerous Good Description UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (N-COCO-1,3-

PROPYLENEDIAMINE, COCO ALKYL AMINES), 8 (6.1), II, IMDG Code

Segregation Group 18 - Alkalis

IMDG Code segregation group Alkalis

14.3 Transport hazard class8Subsidiary hazard class6.1

14.4 Packing group

Packing group II

Label(s) 8 (6.1) EmS F-A , S-B

14.5 Environmental hazards YES

Marine pollutant

14.6 Special precautions for user

For personal protection see section 8.

IATA

14.1 UN number UN 2922

14.2 Dangerous Good Description UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (N-COCO-1,3-

PROPYLENEDIAMINE, COCO ALKYL AMINES), 8 (6.1), II

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14.3 Transport hazard class8Subsidiary hazard class:6.1

14.4 Packing group

Packing group II
Label(s): 8 (6.1)
Packing instruction (cargo aircraft) 855
Max net qty / pkg 30.00 L
Packing instruction (passenger aircraft) 851
Max net qty / pkg 1.00 L

14.5 Environmental hazards YES

Marine pollutant

14.6 Special precautions for user

For personal protection see section 8.

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information

15.1 Notification status

United States TSCA Inventory : YES (positive listing)

On TSCA Inventory

Canadian Domestic Substances List (DSL) : YES (positive listing)

All components of this product are on the

Canadian DSL.

Australia Inventory of Chemical Substances (AICS) : YES (positive listing)

On the inventory, or in compliance with the

inventory

Japan. CSCL - Inventory of Existing and New Chemical Substances : n (Negative listing)

Not in compliance with the inventory

Korea. Korean Existing Chemicals Inventory (KECI) : YES (positive listing)

On the inventory, or in compliance with the

inventory

China. Inventory of Existing Chemical Substances in China (IECSC) : YES (positive listing)

On the inventory, or in compliance with the

inventory

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15.2 Federal Regulations

SARA 311/312 Hazards

Fire Hazard	no
Reactivity Hazard	no
Sudden Release of Pressure Hazard	no
Acute Health Hazard	yes
Chronic Health Hazard	yes

SARA 313 : This material does not contain any chemical components with known CAS

numbers that exceed the threshold (De Minimis) reporting levels established

by SARA Title III, Section 313.

SARA 302 : No chemicals in this material are subject to the reporting requirements of

SARA Title III, Section 302.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Reportable quantity
Unlisted hazardous wastes - Characteristic of Corrosivity		100 lb

SARA 304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Reportable Quantity

This material does not contain any components with a SARA 302 RQ.

15.3 State Regulations

California Prop 65 : This product does not contain any chemicals known to the State of California

to cause cancer, birth, or any other reproductive defects.

SECTION 16: Other information

NFPA-Classification

Health : 3 serious Flammability : 1 slight Instability or Reactivity : 0 minimal

HMIS-Classification

Health : 3 serious Flammability : 1 slight Reactivity : 0 minimal

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Further information

Date Prepared : 9/28/2018

Further information : Product classified under the US GHS format.

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH : American Conference of Governmental Industrial Hygienists

OSHA : Occupational Safety and Health Administration
WHMIS : Workplace Hazardous Materials Information System

NTP : National Toxicology Program

IARC : International Agency for Research on Cancer

NIOSH : National Institute for Occupational Safety and Health

NFPA : National Fire Protection Association

HMIS : Hazardous Materials Identification System (Paint & Coating)

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in another manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.