SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : GEBETANCHE CHAUFFAGE
UFI : FEDW-323C-260Q-WSQK

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

Anaerobic sealing resin

1.3. Details of the supplier of the safety data sheet

Registered company name : GEB.
Address : CS 62062.95972.ROISSY CDG CEDEX . France.
Telephone : +33 1 48 17 99 99. Fax : +33 1 48 17 98 00.
geb@geb.fr
www.geb.fr

1.4. Emergency telephone number : +33 1 45 42 59 59.

Association/Organisation : INRS.

|>SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Eye irritation, Category 2 (Eye Irrit. 2, H319).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

|> In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :

GHS07

Signal Word :

WARNING

Product identifiers :

EC 203-742-5 MALEIC ACID

Hazard statements :

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Precautionary statements - Prevention :

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response :

P302 + P352	IF ON SKIN: Wash with plenty of water and soap.

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Precautionary statements - Disposal :

P501	Dispose of contents/container in accordance with local reglementation

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

|>SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

|> Composition :

Identification	Classification (EC) 1272/2008	Note	%
CAS: 25852-47-5 DIMETHACRYLATE DE POLYETHYLENEGLYCOL	GHS07 Wng Skin Irrit. 2, H315 Eye Irrit. 2, H319		25 <= x % < 50
CAS: 80-15-9 EC: 201-254-7 REACH: 01-2119475796-19 ALPHA ,ALPHA-DIMETHYLBENZYL	GHS06, GHS05, GHS09, GHS08, GHS02 Dgr Org. Perox. E, H242 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Acute Tox. 3, H331 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 2, H411		0 <= x % < 2.5
CAS: 110-16-7 EC: 203-742-5 REACH: 01-2119488705-25-XXX MALEIC ACID	GHS07, GHS05 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 STOT SE 3, H335		0 <= x % < 2.5
CAS: 613-48-9 EC: 210-345-0 N,N-DIETHYLTOLUIDINE	GHS06, GHS08 Dgr Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT RE 2, H373 Aquatic Chronic 3, H412		0 <= x % < 2.5
INDEX: 612-056-00-9 CAS: 99-97-8 EC: 202-805-4 N,N-DIMETHYL-P-TOLUIDINE	GHS06, GHS08 Dgr Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 STOT RE 2, H373 Aquatic Chronic 3, H412	C	0 <= x % < 2.5
CAS: 110-18-9 EC: 203-744-6 TETRAMETHYLETHYLENEDIAMINE -N,N,N',N'	GHS06, GHS05, GHS02 Dgr Flam. Liq. 2, H225 Acute Tox. 3, H301 Skin Corr. 1B, H314 Acute Tox. 3, H331		0 <= x % < 2.5

|> Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 80-15-9 EC: 201-254-7 REACH: 01-2119475796-19 ALPHA ,ALPHA-DIMETHYLBENZYL	Skin Corr. 1B: H314 C>= 10% Skin Irrit. 2: H315 3% <= C < 10%	inhalation: ATE = 1.37 mg/l 4h (dust/mist) dermal: ATE = 1.2 mg/kg BW oral: ATE = 382 mg/kg BW
CAS: 110-16-7 EC: 203-742-5 REACH: 01-2119488705-25-XXX MALEIC ACID	Skin Sens. 1: H317 C>= 0.1%	dermal: ATE = 1560 mg/kg BW oral: ATE = 708 mg/kg BW
CAS: 110-18-9 EC: 203-744-6 TETRAMETHYLETHYLENEDIAMINE -N,N,N',N'		dermal: ATE = 5390 mg/kg BW oral: ATE = 268 mg/kg BW

Information on ingredients :

(Full text of H-phrases: see section 16)

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated aera is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention immediately, showing the label.

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

No data available.

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

No data available.

|>SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- water with AFFF (Aqueous Film Forming Foam) additive
- foam
- powder
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)

|> 5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

|>SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid skin and eye contact with this mixture.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

|> Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

|>SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

|> 8.1. Control parameters

No data available.

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

MALEIC ACID (CAS: 110-16-7)

|> **Final use:**	**Workers.**
Exposure method:	Inhalation.
Potential health effects:	Short term local effects.
DNEL :	3 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	3 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	3 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	3 mg of substance/m3

ALPHA ,ALPHA-DIMETHYLBENZYL (CAS: 80-15-9)

|> **Final use:**	**Workers.**
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	6 mg of substance/m3

|> Predicted no effect concentration (PNEC):

MALEIC ACID (CAS: 110-16-7)

Environmental compartment:	Soil.
PNEC :	0.0415
Environmental compartment:	Fresh water.
PNEC :	0.1 mg/l
Environmental compartment:	Sea water.
PNEC :	0.01 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	0.4281 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	0.334 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.0334 mg/kg
Environmental compartment:	Waste water treatment plant.

PNEC :	44.6 mg/l

ALPHA ,ALPHA-DIMETHYLBENZYL (CAS: 80-15-9)

Environmental compartment:	Soil.
PNEC :	1.2 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.0031 mg/l
Environmental compartment:	Sea water.
PNEC :	0.00031 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	0.031
Environmental compartment:	Fresh water sediment.
PNEC :	0.023 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.0023 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	0.35 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

|> **- Hand protection**

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

|> **- Body protection**

Avoid skin contact.

Wear suitable protective clothing.

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

|>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state
Physical state : Viscous liquid.

Colour
Unspecified

Odour
Odour threshold : Not stated.

|> **Freezing point**
Freezing point / Freezing range : Not stated.

|> **Boiling point or initial boiling point and boiling range**
Boiling point/boiling range : Not relevant.

Flammability
Flammability (solid, gas) : Not stated.

Lower and upper explosion limit
Explosive properties, lower explosivity limit (%) : Not stated.
Explosive properties, upper explosivity limit (%) : Not stated.

|> **Flash point**
Flash Point Interval : FP > 100°C.

Auto-ignition temperature
Self-ignition temperature : Not relevant.

Decomposition temperature
Decomposition point/decomposition range : Not relevant.

pH
pH (aqueous solution) : Not stated.
pH : Not relevant.

|> **Kinematic viscosity**
Viscosity : Not stated.

|> **Solubility**
Water solubility : Insoluble.
Fat solubility : Not stated.

|> **Partition coefficient n-octanol/water (log value)**
Partition coefficient: n-octanol/water : Not stated.

Vapour pressure
Vapour pressure (50°C) : Not relevant.

|> **Density and/or relative density**
Density : > 1

Relative vapour density
Vapour density : Not stated.

|> **Particle characteristics**
The mixture does not contain nanoforms.

|> **9.2. Other information**
VOC (g/l) : 1.59

9.2.1. Information with regard to physical hazard classes
No data available.

9.2.2. Other safety characteristics
No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

|>SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

May cause an allergic reaction by skin contact.

11.1.1. Substances

|> Acute toxicity :

TETRAMETHYLETHYLENEDIAMINE -N,N,N',N' (CAS: 110-18-9)

Oral route :	LD50 = 268 mg/kg bodyweight/day Species : Rat
Dermal route :	LD50 = 5390 mg/kg bodyweight/day Species : Rabbit

MALEIC ACID (CAS: 110-16-7)

Oral route :	LD50 = 708 mg/kg bodyweight/day Species : Rat
Dermal route :	LD50 = 1560 mg/kg bodyweight/day Species : Rabbit
Inhalation route (Dusts/mist) :	LC50 > 720 mg/m3 Species : Rat

ALPHA ,ALPHA-DIMETHYLBENZYL (CAS: 80-15-9)

Oral route :	LD50 = 382 Species : Rat
Dermal route :	LD50 = 1.200 mg/kg bodyweight/day
Inhalation route (Dusts/mist) :	LC50 = 1.370 mg/l Duration of exposure : 4 h

Skin corrosion/skin irritation :

MALEIC ACID (CAS: 110-16-7)

Corrosivity : Causes severe skin burns.

ALPHA ,ALPHA-DIMETHYLBENZYL (CAS: 80-15-9)

Species : Rabbit

Species : Rabbit

Serious damage to eyes/eye irritation :

MALEIC ACID (CAS: 110-16-7)

The substance produces at least in one animal effects on the cornea that are not expected to reverse or have not fully reversed within an observation period of normally 21 days.

|> 11.1.2. Mixture

|> Acute toxicity :

Dermal route : No observed effect.
Species : Rabbit
2,000 < LD50 <= 5000 mg/kg
OECD Guideline 402 (Acute Dermal Toxicity)

11.2. Information on other hazards

|> Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 101-68-8 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 98-82-8 : IARC Group 2B : The agent is possibly carcinogenic to humans.

CAS 99-97-8 : IARC Group 2B : The agent is possibly carcinogenic to humans.

CAS 81-07-2 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

|>SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

|> 12.1.1. Substances

MALEIC ACID (CAS: 110-16-7)

Fish toxicity : LC50 = 5 mg/l
Species : Pimephales promelas
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 400 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

Aquatic plant toxicity : ECr50 = 41 mg/l
Species : Others
Duration of exposure : 72 h

ALPHA ,ALPHA-DIMETHYLBENZYL (CAS: 80-15-9)

Fish toxicity : LC50 = 3.9 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 96 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

|> **12.2.1. Substances**

MALEIC ACID (CAS: 110-16-7)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

ALPHA ,ALPHA-DIMETHYLBENZYL (CAS: 80-15-9)

Biodegradability : Rapidly degradable.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number or ID number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Maritime transport in bulk according to IMO instruments

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|>SECTION 15: Regulatory information

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

|> Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

|> Container information:

No data available.

|> Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach.

|> Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

|>SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

|> Wording of the phrases mentioned in section 3 :

H225	Highly flammable liquid and vapour.
H242	Heating may cause a fire.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure .
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
ATE : Acute Toxicity Estimate
BW : Body Weight
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
UFI : Unique formulation identifier.
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefahrdungsklasse (Water Hazard Class).
GHS07 : Exclamation mark
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.
|> Modification compared to the previous version