

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Product: **VULTAC® TB 710**

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SDS No.: 002337-001 (Version 2.1)

Date 19.03.2014 (*Cancel and replace* : 19.03.2012)

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the product

Identification of the mixture: VULTAC® TB 710

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

Use of the Substance/Mixture : Curing chemical

1.3. Details of the supplier of the safety data sheet

Supplier	Arkema THIOCHIMIE 420 rue d'Estienne d'Orves 92705 Colombes Cedex, France Téléphone : +33 (0)1 49 00 80 80 Télécopie : +33 (0)1 49 00 83 96 http://www.arkema.com pars-drp-fds@arkema.com
E-mail address	

1.4. Emergency telephone number

+33 1 49 00 77 77
European emergency phone number : 112
National Chemical Emergency Centre Tel: 01865 407 333

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No 1272/2008):
Skin sensitisation, 1, H317

Classification according to EU Directives 1999/45/EC :

Xi; R43

Additional information:

For the full text of the R, H, EUH-phrases mentioned in this Section, see Section 16.

2.2. Label elements

Label elements (Regulation (EC) No 1272/2008):

Hazardous components which must be listed on the label:

Phenol, 4-(1,1-dimethylethyl)-, polymer with sulfur chloride (S2Cl2)

Hazard pictograms:



Signal word:

Warning

Hazard statements:

H317 : May cause an allergic skin reaction.

Precautionary statements:

Prevention:

P261 : Avoid breathing dust/fume

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

Response:

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

P333 + P313 : If skin irritation or rash occurs: Get medical advice/ attention.

2.3. Other hazards

Potential health effects:

Irritation: Slightly irritating to eyes.

Skin contact: Risk of skin sensitization.

Environmental Effects:

Not readily biodegradable. Potentially bioaccumulable

Physical and chemical hazards:

Thermal decomposition giving flammable and toxic products

Decomposition products: See chapter 10

Other:

Results of PBT and vPvB assessment : This information is not required.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical nature of the mixture¹:

Preparation based on :

Components :

Chemical Name ¹ & REACH Registration Number ²	EC-No.	CAS-No.	Concentration	Classification Directive 67/548/EEC	Classification Regulation (EC) No 1272/2008
Stearic acid	200-313-4	57-11-4	< 10 %	–	

Hazardous components (according to Regulation (EC) No. 1907/2006) :

Chemical Name ¹ & REACH Registration Number ²	EC-No.	CAS-No.	Concentration	Classification Directive 67/548/EEC	Classification Regulation (EC) No 1272/2008
Phenol, 4-(1,1-dimethylethyl)-, polymer with sulfur chloride (S2Cl2)	–	60303-68-6	< 95 %	Xi; R43	Skin Sens. 1; H317

Hazardous impurities :

Chemical Name ¹	EC-No.	CAS-No.	Concentration	Classification Directive 67/548/EEC	Classification Regulation (EC) No 1272/2008
Sulfur	231-722-6	7704-34-9	< 3 %	Xi; R38	Skin Irrit. 2; H315

¹: See chapter 14 for Proper Shipping Name

²: See the text of the regulation for applicable exceptions or provisions : The transition time according to REACH Regulation, Article 23, is still not expired.

For the full text of the R, H, EUH-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1. & 4.2. Description of necessary first-aid measures & Most important symptoms/effects, acute and delayed:

General advice:

Take off immediately all contaminated clothing.

Inhalation:

Move to fresh air. Oxygen or artificial respiration if needed. In case of persistent problems : Consult a physician.

Skin contact:

Wash off immediately with plenty of water. If skin irritation persists, call a physician.

Eye contact:

Wash well-open eyes immediately, abundantly and thoroughly with water. Consult an ophthalmologist.

Ingestion:

In case of problems : Consult a doctor.

Protection of first-aiders:

In case of insufficient ventilation, wear suitable respiratory equipment. Protective suit Gloves

4.3. Indication of immediate medical attention and special treatment needed, if necessary : No data available.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Foam, Dry powder, Carbon dioxide (CO2)

5.2. Special hazards arising from the substance or mixture:

Thermal decomposition giving flammable and toxic products:, Sulphur oxides, Carbon oxides

5.3. Advice for firefighters:

Special protective actions for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Prohibit contact with skin and eyes and inhalation of dust. Wear suitable gloves. In the case of respirable dust, use self-contained breathing apparatus.

6.2. Environmental precautions:

Do not release into the environment.

6.3. Methods and materials for containment and cleaning up:

Recovery:

Recover the product. Sweep up to prevent slipping hazard.

Elimination:

Destroy the product by incineration (in accordance with local and national regulations).

6.4. Reference to other sections: None.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling:

Technical measures/Precautions:

Storage and handling precautions applicable to products: Solid (pellets). Sensitizing. Provide appropriate exhaust ventilation at machinery. Provide showers, eye-baths. Provide self-contained breathing apparatus nearby. Provide electrical earthing of equipment.

Safe handling advice:

Avoid the formation and deposition of dust.

Hygiene measures:

Prohibit contact with skin and eyes and inhalation of dust. When using do not eat, drink or smoke. Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities:

Keep in a dry, cool and well-ventilated place. Store protected from moisture and heat. (Do not exceed 50°C). Protect against light, UV radiation.

Incompatible products:

Strong oxidizing agents

Packaging material:

Recommended: Cardboard lined with polyethylene liner

7.3. Specific end use(s): None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Exposure Limit Values Not relevant

Derived No Effect Level (DNEL): PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

According to REACH regulation, article 2(9), the substance does not require registration.
Therefore, this information is not required.

Derived No Effect Level (DNEL): STEARIC ACID :

End Use	Inhalation	Ingestion	Skin contact
Workers	17,6 mg/m ³ (LT, SE)		10 mg/kg (LT, SE)
Consumers	4,3 mg/m ³ (LT, SE)	2,5 mg/kg (SE, LT)	5 mg/kg (SE, LT)

LE : Local effects, **SE** : Systemic effects, **LT** : Long term, **ST** : Short term

Predicted No Effect Concentration: PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

According to REACH regulation, article 2(9), the substance does not require registration. Therefore, this information is not required.

8.2. Exposure controls:

General protective measures: Ensure sufficient air exchange and/or exhaust in work areas

Personal protective equipment:

Respiratory protection:	Provide self-contained breathing apparatus nearby (thermal decomposition giving flammable and toxic products).
Hand protection:	Gloves (synthetic rubber, plastic materials)
Eye/face protection:	Safety glasses
Skin and body protection:	Protective suit

Environmental exposure controls: See chapter 6

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:

Physical state (20°C):	solid
Form:	pellets
Colour:	amber
Odour:	Slightly acrid
Olfactory threshold:	No data available.
pH:	No data available.
softening temperature :	75 - 95 °C
Boiling point/boiling range:	No data available.
Flash point:	closed cup: > 200 °C
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Vapour pressure:	not applicable
Vapour density:	not applicable
Relative density:	No data available.
Bulk density:	approx. 800 kg/m ³
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	STEARIC ACID : log K _{ow} : > 8,23
Auto-ignition temperature :	STEARIC ACID : 395 °C
Decomposition temperature:	No data available.
Viscosity, dynamic:	10.000 mPa.s , at 120 °C
Explosive properties:	
Explosivity:	Not relevant (due to the chemical structure)

Oxidizing properties: Not relevant (due to the chemical structure)

9.2. Other data:

Solubility in other solvents: Soluble in: xylene , Toluene

10. STABILITY AND REACTIVITY

10.1. & 10.2. Reactivity & Chemical stability:

The product is stable under normal handling and storage conditions.

10.3. Possibility of hazardous reactions:

None under normal conditions of use.

10.4. Conditions to avoid:

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials to avoid:

Strong oxidizing agents

10.6. Hazardous decomposition products:

Thermal decomposition giving flammable and toxic products, Carbon oxides, Sulphur oxides

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Acute toxicity:

Ingestion: According to its composition, can be considered as : Slightly harmful by ingestion

PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

• In animals : No mortality/rat: 2.000 mg/kg (Method: OECD Test Guideline 401)

STEARIC ACID :

• In animals : LD50/rat: 2.000 mg/kg (Method: OECD Test Guideline 401)

Dermal: According to its composition, can be considered as : Slightly harmful in contact with skin

PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

• In animals : No mortality/rat: 2.000 mg/kg (Method: OECD Test Guideline 402)

STEARIC ACID :

• In animals : LD50/rabbit: > 2.000 mg/kg

Local effects (Corrosion / Irritation / Serious eye damage):

Skin contact: According to its composition, can be considered as : Slightly or not irritating to skin

PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

• In animals : Mild skin irritation (OECD Test Guideline 404, rabbit)

SULFUR :

• In animals : Skin irritation (OECD Test Guideline 404, rabbit, Exposure time: 4 h)

STEARIC ACID :

• In animals : No skin irritation (after occlusive contact, rabbit, Exposure time: 24 h)

Eye contact: According to its composition, can be considered as : Slightly irritating to eyes.

PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

• In animals : Mild eye irritation (OECD Test Guideline 405, rabbit)

STEARIC ACID :

• In animals : Mild eye irritation (Draize Test, rabbit)

Respiratory or skin sensitisation:

Inhalation: No data available.

Skin contact: From its composition, it must be considered as: Skin sensitizer

PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

- In animals : Strong sensitizing effects by skin contact. (Method : OECD Test Guideline 406 Guinea pig maximization test)

STEARIC ACID :

- In animals : There is no data available for this product., Through analogy with a comparable product :, Not a skin sensitizer (guinea pig)

CMR effects :

Mutagenicity: According to its composition, can be considered as : **Not genotoxic**

In vitro

PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

Inactive in genotoxic in vitro tests
Ames test in vitro: (Method: OECD Test Guideline 471)
In vitro chromosomal abnormality test on human lymphocytes: (Method: OECD Test Guideline 473)

STEARIC ACID :

Through analogy with a comparable product :Inactive in genotoxic in vitro tests
Ames test in vitro: (Method: OECD Test Guideline 471)
Tests for chromosome aberrations in vitro on mammalian cells: (Method: OECD Test Guideline 473)
In vitro gene mutations test on mammalian cells: (Method: OECD Test Guideline 476)

Carcinogenicity: No data available.

Reproductive toxicity:

Fertility: Based on the available information, it is not possible to conclude on the hazard potential of this mixture.

STEARIC ACID :

- In animals : Through analogy with a comparable product :, Absence of toxic effects on fertility
NOAEL (Fertility): 1.000 mg/kg bw/day
(rat, By oral route)

Foetal development: Based on the available information, it is not possible to conclude on the hazard potential of this mixture.

STEARIC ACID :

- In animals : Exposure during pregnancy: Through analogy with a comparable product :, Absence of toxic effects for foetal development
NOAEL (Developmental Toxicity): 1 mg/kg bw/day
(rat, By oral route)

Specific target organ toxicity :

Single exposure : No data available.

Repeated exposure: Based on the available information, it is not possible to conclude on the hazard potential of this mixture.

STEARIC ACID :

- In animals : By oral route: Through analogy with a comparable product :
No specific toxic effects, NOAEL= 1.000 mg/kg (Method: Repeated exposure at high concentrations, rat)

Aspiration hazard: Not applicable

12. ECOLOGICAL INFORMATION

12.1. Toxicity :

Fish: According to its composition, can be considered as : , Slightly harmful to fish

PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

LR50 (Brachydanio rerio) : > 1.000 mg/l (Method: OECD Test Guideline 203)

STEARIC ACID :

LC50 (Leuciscus idus (Golden orfe)) : > 10 g/l (Method: Standard : DIN 38412-15) No effect up to the limit of solubility

Aquatic invertebrates: According to its composition, can be considered as : , Slightly harmful to daphnia

PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

LR50, 48 h (Daphnia magna (Water flea)) : > 995,8 mg/l (Method: OECD Test Guideline 202)

STEARIC ACID :

EC50, 47 h : > 32 mg/l (Method: Directive 67/548/EEC, Annex V, C.2., Immobilization) No effect up to the limit of solubility

Aquatic plants:

According to its composition, can be considered as : , Slightly harmful to algae

PHENOL, 4-(1,1-DIMETHYLETHYL)-, POLYMER WITH SULFUR CHLORIDE (S₂CL₂) :

LrR50, 72 h (Pseudokirchneriella subcapitata) : > 998 mg/l (Method: OECD Test Guideline 201)

STEARIC ACID :

No effect up to the limit of solubility, (Results obtained on a similar product).

12.2. Persistence and degradability :

Stability in water:

Not hydrolysable
(at 25 °C)

Biodegradation (In water):

Not readily biodegradable.

STEARIC ACID :

Readily biodegradable

12.3. Bioaccumulative potential :

STEARIC ACID :

Partition coefficient: n-octanol/water: log K_{ow} : > 8,23

12.4. Mobility in soil - Distribution among environmental compartments: No data available.

12.5. Results of PBT and vPvB assessment :

This information is not required.

12.6. Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment:

Disposal of product:

Destroy the product by incineration (in accordance with local and national regulations).

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Safety data sheets: according to Regulation (EC) No. 1907/2006

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

Additional regulations (European Union) :

Hazardous Waste Regulations 2005

Applies

The Control of substances Hazardous to Health Regulations 2002 (as ammended)

Banned and/or restricted

UK REGULATION

Chip3: Chemical (Hazard Information and Packaging for Supply) Regulations 2002

15.2. Chemical Safety Assessment: None.

INVENTORIES:

EINECS: Conforms to
TSCA: Conforms to
AICS: Does not conform
DSL: All components of this product are on the Canadian DSL.
ENCS (JP): Conforms to
KECI (KR): Does not conform
PICCS (PH): Conforms to
IECSC (CN): Conforms to

16. OTHER INFORMATION

Full text of R, H, EUH-phrases referred to under sections 2 and 3

R38 Irritating to skin.
R43 May cause sensitisation by skin contact.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

Update:

Safety datasheet sections which have been updated:		Type:
7	Technical measures/Precautions, Storage	Revisions

Thesaurus:

NOAEL : No Observed Adverse Effect Level (NOAEL)
LOAEL : Lowest Observed Adverse Effect Level (LOAEL)
bw : Body weight
food : oral feed
dw : Dry weight
vPvB : very Persistent and very Bioaccumulative
PBT : Persistent, Bioaccumulative and Toxic

This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA. In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear. The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).