



Designing chemical mixtures with the least possible impact on health and environment

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Risk Prevention Policy of EIFFAGE INFRASTRUCTURES

**Achieve the « 100 % Safety », our life-long goal
Design, use, products with the least amount of health impacts,
Eliminate or substitute any dangerous chemical whenever technically possible,
EIFFAGE INFRASTRUCTURES, official Partner of EU-OSHA**





EIFFAGE

×

FORMULA[®]
SAFE

**Safety is our
life-long goal**

***Ensure the health
protection of the public,
the local residents, the
employees***

***Ensure the environment
protection of the
production sites and the
work area***

***Ensure the neutrality of
the products to the
customers***

***The development of
innovative road products
requires effort of research
and innovation on several
years***



- **Computerised tool that assists the formulation of chemical mixtures,**
- **Helps design finished products with the least amount of health and environmental impacts, even before handling or tests in our laboratories**
- **Propose some substitutes**
- **Indicates the substances that require special conditions of storage and transport at the product design stage**
- **Product of the CLP calculations according to GHS/CLP rules**
- **Allow a better control of raw materials**
- **Secure all the production line**

Different Modules



Formula
Calculator

CLP
Calculation

MSDS
Production

Available in EN / FR / SP

Formula calculator

Formula safe Product management

Rapid navigation
 producer product

Product selected


Name of product on documents, e.g. "Biprene 41, Biprene 63, Biprene 83" Date of publication
 example eu-OSHA

Product name for the software, e.g. "Biprene" Product Type dd/mm/yyyy
 example Fluxed bitumen

producer Production started Production ended
 ALE - Siège 15/02/2019

Composition ➔ Attention class. ICPE 4510

Type of component	Component	Producer	MSDS date	Dosage (%)	
				Min	Max
Bitumen	Azalt 70/100 / v14 - Total		27/10/2014		90
Cross-linking	Retisafe / v16 - ALE		17/03/2016		5
Flux	Greenflux 2000 / v11 - Total		07/02/2011		17

Return to Menu 

Quit app

CLP calculation results

example - ALE - Siège

Classification of acute risks

Sentences	Substances	CAS / Reach / CE	Origin	M Factor	Concentration taken into account	Concentration in the component (%)	Concentration in the mixture (%)	Influence (%)
No substances classified								

Not classified for acute toxicity

Classification of chronic risks

Sentences	Substances	CAS / Reach / CE	Origin	M Factor	Concentration taken into account	Concentration in the component (%)	Concentration in the mixture (%)	Influence (%)
H410	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	1	0	10	0.5	100


H412 Chronic toxicity category 3

Health classification

Sentences	Substances	CAS / Reach / CE	Origin	Concentration in the component (%)	Concentration in the mixture (%)	Influence (%)
H315	Soufre élémentaire	7704-34-9/231-722-6/01-211	Retisafe	30	1.5	/
H315	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	10	0.5	/
H319	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	10	0.5	/
H317	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	10	0.5	50
H373	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	10	0.5	/
H304	Hydrocarbures, C11-C14	64742-47-8/926-141-6/01-21	Greenflux 2000	100	17	100

Double click on codes to display full sentences **EUH208 + H304**

P sentences



Incidence calculation

CLP calculation

CLP calculation

publishing date: 18/02/2019 document reference: 2019087 Rev.1 page: 1 / 2
 product: example eu-OSHA
 producer: ALE - Siège warehouse manager: LASSALAS Frédéric
 Irreversible Hällarthe B8002 LYON Cedex binders manager: DIGNONNET Benoit

Product components

Type	Component	producer	Qty	Bin	Size	MDSO date
Stamen	Acid 7D100	Total			90	27/02/2014
Cross-linking agent	Relaxife	ALE			5	17/03/2016
Flux	Greenflux 2000	Total			17	07/02/2011



Environmental classification

Acute toxicity

Phrases	Substance	CAS OE REACH	Source component	H factor	Concentration (%)		Influence
					In substance	In mix	
H410	Dioxifure de tétraméthylthiuram	137-26-8 205-295-2 05-2114504702-54	Relaxife		0.5	100	

Not classified for acute toxicity

Chronic toxicity

Phrases	Substance	CAS OE REACH	Source component	H factor	Concentration (%)		Influence
					In substance	In mix	
H411	Dioxifure de tétraméthylthiuram	137-26-8 205-295-2 05-2114504702-54	Relaxife		0.5	100	

H412 Chronic toxicity category 3

Health classification

Skin corrosion / Irritation based on Tables 3.2.3 and 3.2.4 CLP regulation 6GH 1272/2008

Phrases	Substance	CAS OE REACH	Source component	Component dosage (%)	Substance in component (%)	Concentration retained (%)
H314	couche élémentaire	7704-34-9 231-722-6 01-2119487295-27	Relaxife	5.0	30	< 10
H314	Dioxifure de tétraméthylthiuram	137-26-8 205-295-2 05-2114504702-54	Relaxife	5.0	10	< 10

Not labelled

Eye damage / Irritation from Tables 3.3.3. and 3.3.4 CLP Regulation 6GH 1272/2008

Phrases	Substance	CAS OE REACH	Source component	Component dosage (%)	Substance in component (%)	Concentration retained (%)
H319	Dioxifure de tétraméthylthiuram	137-26-8 205-295-2 05-2114504702-54	Relaxife	5.0	10	< 10

Not labelled

CLP calculation

publishing date: 18/02/2019 document reference: 2019087 Rev.1 page: 2 / 2
 product: example eu-OSHA

Respiratory / skin sensitization based on Tables 3.4.7 and 3.4.8. EU Regulation 286/2011

Phrases	Substance	CAS OE REACH	Source component	Component dosage (%)	Substance in component (%)	Concentration retained (%)
H373	Dioxifure de tétraméthylthiuram	137-26-8 205-295-2 05-2114504702-54	Relaxife	5.0	10.0	0.5

Contains Dioxifure de tétraméthylthiuram. May produce an allergic reaction.

Carcinogenicity according to Table 3.6.2 and 3.6.3. Regulation CLP 6GH 1272/08

Not labelled

Reproductive toxicity based on Tables 3.7.2 and 3.7.3 CLP regulation 6GH 1272/08

Not labelled

Specific target organ toxicity single exposure

\$TOT 3E from Tables 3.8.3. and 3.8.4 CLP Regulation 6GH 1272/08

Not labelled

Specific target organ toxicity repeated exposure

\$TOT RE according to Tables 3.8.3 and 3.8.4 CLP regulation 6GH 1272/08

Phrases	Substance	CAS OE REACH	Source component	Component dosage (%)	Substance in component (%)	Concentration retained (%)
H373	Dioxifure de tétraméthylthiuram	137-26-8 205-295-2 05-2114504702-54	Relaxife	5.0	10.0	< 1

Not labelled

Aspiration hazard according to Table 3.10.2 CLP regulation 6GH 1272/08

Phrases	Substance	CAS OE REACH	Source component	Component dosage (%)	Substance in component (%)	Concentration retained (%)
H304	Hydrocarbures, C11-C14, n-alcanes, isocalcanes, cyclohex + 2% aromatiques	64740-47-8 205-141-6 01-2119486620-03**	Greenflux 2000	17.0	100.0	17.0

May be fatal if swallowed and enters airways.

End of classification

Design chemical mixture

Formula safe Product management

Rapid navigation
 producer product


Product selected
 Name of product on documents, e.g. "Biprene 41, Biprene 63, Biprene 83" Date of publication
 example eu-OSHA|

Product name for the software, e.g. "Biprene" Product Type dd/mm/yyyy
 example Fluxed bitumen

producer Production started Production ended
 ALE - Siège 15/02/2019
 jj/mm/aaaa jj/mm/aaaa

Composition Attention class. ICPE 4510 Dosage (%)

Type of component	Component	Producer	MSDS date	Min	Max
Bitumen	Azalt 70/100 / v14 - Total		27/10/2014		90
Cross-linking	Retisafe / v16 - ALE		17/03/2016		5
Flux	Greenflux 2000 / v11 - Total		07/02/2011		9,9

Return to Menu New inputs  Component not listed

Quit app Duplicate formula Save **CLP calculation**

CLP calculation results

example - ALE - Siège

Classification of acute risks

Sentences	Substances	CAS / Reach / CE	Origin	M Factor	Concentration taken into account	Concentration in the component (%)	Concentration in the mixture (%)	Influence (%)
No substances classified								

Not classified for acute toxicity

Classification of chronic risks

Sentences	Substances	CAS / Reach / CE	Origin	M Factor	Concentration taken into account	Concentration in the component (%)	Concentration in the mixture (%)	Influence (%)
H410	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	1	0	10	0.5	100

H412 Chronic toxicity category 3

Health classification

Sentences	Substances	CAS / Reach / CE	Origin	Concentration in the component (%)	Concentration in the mixture (%)	Influence (%)
H315	Soufre élémentaire	7704-34-9/231-722-6/01-211	Retisafe	30	1.5	/
H315	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	10	0.5	/
H319	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	10	0.5	/
H317	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	10	0.5	50
H373	Disulfure de tétraméthyl	137-26-8/205-286-2/05-2114	Retisafe	10	0.5	/
H304	Hydrocarbures, C11-C14	64742-47-8/926-141-6/01-21	Greenflux 2000	100	9.9	/

Double click on codes to display full sentences **EUH208**

No pictograms for this product

P sentences
 Back
 CLP report
 Publish MSDS

+ Third module editing MSDS

For further details : Website EU- OSHA Good practice exchange platform



OBJECTIVE

**100%
SAFETY**

IS OUR LIFE-LONG GOAL

 **EIFFAGE**