BLACK PIGMENT

Version 1 Issue date: 12/02/2016
Version 11 (replaces version 10) Revision date: 13/09/2024 Print date: 16/09/2024

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

1.1 Product identifier.

Product name:	BLACK PIGMENT

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

Use of the preparation: High-resistance water-based coating indicated for Microcement

Uses advised against:

Any use not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet.

Company:	**SATINE FACTORY S.L**
Address:	C/ Coure 16-24
Town:	12530 - Burriana
Province:	Castellón
Telephone:	964100100
Fax:	692100100
E-mail:	info@satine.es
Web:	www.satine.com

1.4 Emergency telephone number:

(Monday-Friday; 08:00-14:00) +34 692 100 100

2 HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.

The mixture has been assessed and/or tested to determine its physical, health and environmental hazards, and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 (CLP) and its subsequent amendments

Health hazards

Serious eye damage/eye irritation	Category 2 H319 - Causes serious eye irritation.

2.2 Label elements. Labelling according to Regulation (EC) No 1272/2008:

Contains	oxirane, methyl-, polymer with oxirane, mono-C10-16-alkyl ethers, phosphates, poly(oxy-1,2-ethanediyl), alpha-isotridecyl-omega-hydroxy-, phosphates
Hazard pictograms	
Signal word	Warning
Hazard statements	H319 - Causes serious eye irritation.
Precautionary statements	**Prevention** P264 Wash thoroughly after handling. P280 Wear eye protection/face protection. **Response** P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **Storage** Not available. **Disposal** Not available.
Supplemental label information	EUH208 - Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

2.3 Other hazards.

The mixture does not contain any substance included in the list established in accordance with Article 59(1) of REACH as having endocrine-disrupting properties at a concentration equal to or greater than 0.1% by weight.

3 COMPOSITION/INFORMATION ON INGREDIENTS.

3.2 Mixtures

Contains:

General information

Chemical name	%	CAS number / EC number	REACH registration number	Index number
oxirane, methyl-, polymer with oxirane, mono-C10-16-alkyl ethers, phosphates	1 - < 3	68649-29-6 -	Exempt	-
Classification:	Skin Irrit. 2; H315, Eye Dam. 1; H318			
poly(oxy-1,2-ethanediyl), alpha-isotridecyl-omega-hydroxy-, phosphates	1 - < 3	73038-25-2 615-892-2	Exempt	-
Classification:	Skin Irrit. 2; H315, Eye Dam. 1; H318, Aquatic Chronic 3; H412			
styrylphenol, ethoxylated	1 - < 3	104376-75-2 -	Exempt	-
Classification:	Aquatic Chronic 2; H411			
Sodium hydroxide	< 0.3	1310-73-2 215-185-5	01-2119457892-27-XXXX	011-002-00-6
Classification:	Met. Corr. 1; H290, Acute Tox. 3; H301 (ATE: 140 mg/kg bw), Acute Tox. 4; H312 (ATE: 1350 mg/kg bw), Skin Corr. 1A; H314, Eye Dam. 1; H318			
Specific concentration limit:	Skin Corr. 1A; H314: C ≥ 5 %, Skin Corr. 1B; H314: 2 % ≤ C < 5 %, Skin Irrit. 2; H315: 0.5 % ≤ C < 2 %, Eye Dam. 1; H314: C ≥ 2 %, Eye Irrit. 2; H319: 0.5 % ≤ C < 2 %			

Chemical name	%	CAS number / EC number	REACH registration number	Index number
3-iodo-2-propynyl butylcarbamate	< 0.1	55406-53-6 259-627-5	Exempt	616-212-00-7
Classification:	Acute Tox. 4; H302 (ATE: 500 mg/kg bw), Acute Tox. 3; H331 (ATE: 0.5 mg/L), Eye Dam. 1; H318, Skin Sens. 1; H317, STOT RE 1; H372, Aquatic Acute 1; H400 (M=10), Aquatic Chronic 1; H410 (M=1)			
Bronopol	< 0.1	52-51-7 200-143-0	Exempt	603-085-00-8
Classification:	Acute Tox. 4; H302 (ATE: 500 mg/kg bw), Acute Tox. 4; H312 (ATE: 1100 mg/kg bw), Skin Irrit. 2; H315, Eye Dam. 1; H318, STOT SE 3; H335, Aquatic Acute 1; H400 (M=10), Aquatic Chronic 2; H411			
1,2-benzisothiazol-3(2H)-one	< 0.036	2634-33-5 220-120-9	Exempt	613-088-00-6
Classification:	Acute Tox. 4; H302 (ATE: 500 mg/kg bw), Acute Tox. 2; H330 (ATE: 0.05 mg/L), Skin Irrit. 2; H315, Eye Dam. 1; H318, Skin Sens. 1; H317, Aquatic Acute 1; H400, Aquatic Chronic 2; H411			
Specific concentration limit:	Skin Sens. 1; H317: C ≥ 0.05 %			
Reaction mass of 5-chloro-2-methyl -2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	< 0.0015	55965-84-9 611-341-5	Exempt	613-167-00-5
Classification:	Acute Tox. 3; H301 (ATE: 100 mg/kg bw), Acute Tox. 2; H310 (ATE: 50 mg/kg bw), Acute Tox. 2; H330 (ATE: 0.5 mg/L), Skin Corr. 1C; H314, Eye Dam. 1; H318, Skin Sens. 1A; H317, Aquatic Acute 1; H400 (M=100), Aquatic Chronic 1; H410 (M=100)			
Supplementary hazard statements:	EUH071			
Specific concentration limit:	Skin Corr. 1C; H314: C ≥ 0.6 %, Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 %, Eye Dam. 1; H318: C ≥ 0.6 %, Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 %, Skin Sens. 1A; H317: C ≥ 0.0015 %			
Other components below reportable limits	90 - 100			

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor
vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: Union workplace exposure limits apply to this substance.

All concentrations are in percent by weight unless the component is a gas. Gas concentrations are in percent by volume.

Comments on the components	The full text of all H-statements is given in Section 16.

4 FIRST-AID MEASURES

4.1 Description of first aid measures

No incidents of harm to personnel handling the product are known. If necessary, the following general measures should be taken:

INHALATION: Move to fresh air. Call a doctor if symptoms appear or persist

INGESTION: Rinse mouth. Obtain medical attention if symptoms occur.

EYES and SKIN: Wash with soap and water. Seek medical attention if irritation develops and persists. Rinse eyes immediately with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision.

4.3 Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and symptomatic treatment. Keep the victim under observation. Symptoms may be delayed.

5 FIREFIGHTING MEASURES

5.1 Extinguishing media

SUITABLE EXTINGUISHING MEDIA

Water spray. Foam. Dry chemical powder. Carbon dioxide (CO_2).

UNSUITABLE EXTINGUISHING MEDIA

Do not use a water jet, as it would spread the fire

5.2 Special hazards arising from the substance or mixture

Harmful gases may be formed in the event of fire

5.3 Advice for firefighters

Special protective equipment to be worn by firefighters

Wear self-contained breathing apparatus and full protective clothing in case of fire.

Special firefighting procedures

Move containers from the fire area if it can be done without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other materials involved

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

FOR NON-EMERGENCY PERSONNEL

Alert the personnel responsible for dealing with such emergencies. Move away from the accident area if the personal protective equipment specified in section 8 is not available.

FOR EMERGENCY RESPONDERS

Remove all personnel not adequately equipped to deal with the emergency.

Wear suitable personal protective equipment, as described in section 8 of the safety data sheet, to avoid contamination of the skin, eyes and personal clothing. Stop the leak if there is no danger.

Allow workers into the area affected by the accident only once it has been properly cleared. Ventilate the premises affected by the accident.

6.2 Environmental precautions

Prevent the product from entering sewers, surface water and groundwater.

6.3 Methods and material for containment and cleaning up

Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After recovering the product, flush the area with water.

Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean the surface thoroughly to remove residual contamination. Never return spilled product to the original container for reuse.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear suitable personal protective equipment. Observe good chemical hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Store in a tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

7.3 Specific end use(s)

No specific end uses other than the relevant uses identified in section 1.2 of this safety data sheet are foreseen.

8 INDIVIDUAL EXPOSURE CONTROLS

8.1 Control parameters

Spain. Occupational exposure limits (VLA)

Components	Type	Value	Form
Aluminium silicate (CAS 1332-58-7)	VLA-ED	2 mg/m³	Respirable fraction.
Sodium hydroxide (CAS 1310-73-2)	VLA-EC	2 mg/m³	

Biological limit values

No biological exposure limits are known for the ingredient(s)

Recommended monitoring methods

Follow standard monitoring procedures.

Derived no-effect levels (DNEL)

Not available.

Predicted no-effect concentrations (PNECs)

Not available.

8.2 Exposure controls

Others

Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, use suitable respiratory equipment.

Thermal hazards

Wear suitable thermal protective clothing if necessary.

Hygiene measures

Always follow good personal hygiene practices, such as washing after handling and before eating, drinking and/or smoking. Routinely wash clothing and protective equipment to remove contaminants.

Environmental exposure controls

It must be verified that emissions from ventilation equipment or work processes comply with environmental protection legislation. To reduce emissions to acceptable levels, it may be necessary to use fume scrubbers or filters or to modify the design of the process equipment.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid.
Form	Liquid.
Colour	Black
Odour	Slight
Melting point / freezing point	Not available, we do not determine this characteristic within our quality control.
Boiling point or initial boiling point and boiling range	Not available, we do not determine this characteristic within our quality control.
Flammability	Not applicable
Flash point	Not applicable >100.00 °C (>212.00 °F)
Auto-ignition temperature	Not available, we do not determine this characteristic within our quality control.
Decomposition temperature	Not available, we do not determine this characteristic within our quality control.
pH	> 7 - < 8
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	Not available, we do not determine this characteristic within our quality control.
Partition coefficient (n-octanol/water) (log value)	Not available, we do not determine this characteristic within our quality control.
Vapour pressure	Not available, we do not determine this characteristic within our quality control.
Density and/or relative density	
Density	> 1680 - < 1880 kg/m^3
Vapour density	Not available, we do not determine this characteristic within our quality control.
Particle characteristics	Not available, we do not determine this characteristic within our quality control.

9.2 Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

10 STABILITY AND REACTIVITY

10.1 Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability

The material is stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions are known under normal conditions of use.

10.4 Conditions to avoid

Contact with incompatible materials.

10.5 Incompatible materials

Strong acids, bases and oxidising agents.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

11 TOXICOLOGICAL INFORMATION

General information	Occupational exposure to the substance or mixture may have adverse effects.

Information on likely routes of exposure

Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision.

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

Acute toxicity

Product	Species	Test results
COLTEC® C FS BLACK OXIDE		
Acute - Dermal		
LD50	Rabbit	92309 mg/kg
Acute - Inhalation		
LC50	Rat	817 mg/L, 4 hours
Acute - Oral		
LD50	Rat	16593 mg/kg

Components	Species	Test results
3-iodo-2-propynyl butylcarbamate (CAS 55406-53-6)		
Acute - Dermal		
LD50	Rabbit	> 2000 mg/kg
Acute - Inhalation (Mist)		
LC50	Rat	> 6.89 mg/L, 4 hours
Acute - Inhalation (Dust)		
LC50	Rat	0.67 mg/L, 4 hours
Acute - Oral		
LD50	Rat	300 - 500 mg/kg
Bronopol (CAS 52-51-7)		
Acute - Inhalation		
LC50	Rat	> 5 mg/L, 6 hours
Sodium hydroxide (CAS 1310-73-2)		
Acute - Dermal		
LD50	Rabbit	1350 mg/kg
Acute - Oral		
LD50	Rat	140 - 340 mg/kg
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (CAS 55965-84-9)		
Acute - Dermal		
LD50	Rabbit	87.12 mg/kg
Acute - Inhalation (Mist)		
LC50	Rat	0.33 mg/L, 4 hours
Acute - Oral		
LD50	Rat	64 mg/kg

Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitisation	In view of the available data, the classification criteria are not met.
Skin sensitisation	In view of the available data, the classification criteria are not met.
Germ cell mutagenicity	In view of the available data, the classification criteria are not met.
Carcinogenicity	The risk of cancer cannot be excluded after prolonged exposure.
Reproductive toxicity	In view of the available data, the classification criteria are not met.
Specific target organ toxicity – single exposure	In view of the available data, the classification criteria are not met.
Specific target organ toxicity – repeated exposure	In view of the available data, the classification criteria are not met.
Aspiration hazard	Information on the mixture in relation to the substance

11.2 Information on other hazards

Endocrine disrupting properties	For human health, according to the assessment carried out in accordance with the criteria established in Regulations (EC) No 1907/2006, (EU) 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
Additional information	May cause respiratory and skin allergic reactions

12 ECOLOGICAL INFORMATION

12.1 Toxicity

In view of the available data, the classification criteria as hazardous to the aquatic environment are not met.

Components	Species	Test results
1,2-benzisothiazol-3(2H)-one (CAS 2634-33-5)		
Aquatic (a) - Acute		
Fish - LC50	Bleak (Alburnus alburnus)	>= 8 - <= 13 mg/L, 96 hours
3-iodo-2-propynyl butylcarbamate (CAS 55406-53-6)		
Other - EC50	Microorganisms	44 mg/L, 3 hours
Aquatic (a)		
Crustaceans - EC50	Water flea	0.05 mg/L, 21 days
Fish - LC50	Rainbow trout (Oncorhynchus mykiss)	0.067 mg/L, 96 hours
Fish - NOEC	Fathead minnow (Pimephales promelas)	0.0084 mg/L, 35 days
Fish - NOEC	Rainbow trout	0.049 mg/L, 96 hours
Aquatic (a) - Acute		
Algae - EC50	Algae	0.022 mg/L, 72 hours
Algae - NOEC	Algae	0.0046 mg/L, 72 hours
Crustaceans - EC50	Water flea	0.16 mg/L, 48 hours
Fish - LC50	Rainbow trout (Oncorhynchus mykiss)	0.05 - 0.089 mg/L, 96 hours
Sodium hydroxide (CAS 1310-73-2)		
Aquatic (a) - Acute		
Crustaceans - EC50	Water flea (Ceriodaphnia dubia)	>= 34.59 - <= 47.13 mg/L, 48 hours
Fish - LC50	Mosquitofish (Gambusia affinis)	125 mg/L, 96 hours
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (CAS 55965-84-9)		
Aquatic (a) - Acute		
Algae - EC50	Algae	0.027 mg/L, 72 hours
Algae - NOEC	Algae	0.0014 mg/L, 72 hours
Crustaceans - LC50	Water flea (Daphnia magna)	0.16 mg/L, 48 hours
Fish - LC50	Rainbow trout (Oncorhynchus mykiss)	0.19 mg/L, 96 hours
Aquatic (a) - Chronic		
Crustaceans - NOEC	Water flea (Daphnia magna)	0.1 mg/L, 21 days
Fish - NOEC	Rainbow trout (Oncorhynchus mykiss)	0.05 mg/L, 14 days

Components	Species	Test results
poly(oxy-1,2-ethanediyl), alpha-isotridecyl-omega-hydroxy-, phosphates (CAS 73038-25-2)		
Aquatic (a)		
Crustaceans - EC50	Daphnia magna	> 10 - < 100 mg/L, 48 hours

12.2 Persistence and degradability

No data are available on the degradability of any component of the mixture.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

3-iodo-2-propynyl butylcarbamate: 2.81

Bioconcentration factor (BCF): Not available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Not available.

12.6 Endocrine disrupting properties

This mixture does not contain any substance with endocrine-disrupting properties in relation to the environment, according to the assessment carried out in accordance with the criteria established in Regulations (EC) No 1907/2006, (EU) 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.

12.7 Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Residual products

Dispose of in accordance with local regulations. Empty containers or liners may retain product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since empty containers may retain product residue, follow label warnings even after the container is emptied. Empty containers must be taken to an approved waste handling site for recycling or disposal.

European waste code

The waste code must be assigned by agreement between the user, the producer and the waste disposal company.

Disposal methods/information

Collect and recover or dispose of in sealed containers at an authorised landfill. Dispose of contents/container in accordance with local, regional, national or international regulations.

Special precautions

Dispose of in accordance with all applicable regulations.

14 TRANSPORT INFORMATION

14.1 UN number

Not regulated as a dangerous good.

14.2 UN proper shipping name

Not regulated as a dangerous good.

14.3 Transport hazard class(es)

Class	Not assigned
Subsidiary risk	
Hazard No. (ADR)	Not assigned
Tunnel restriction code	Not assigned

14.4 Packing group

Not assigned

14.5 Environmental hazards

Not assigned

14.6 Special precautions for user

Not assigned

15 REGULATORY INFORMATION

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

Seveso category - Directive 2012/18/EU: E1
Restrictions on the product or contained substances according to Annex XVII of Regulation (EC) 1907/2006 Contained substances
Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable
Candidate List substances (Art. 59 REACH)
According to the available data, the product does not contain SVHC substances at a proportion ≥ 0.1%.
Substances subject to authorisation (Annex XIV REACH)
None

Biocides Regulation (Reg. (EU) 528/2012):

not applicable

Detergents Regulation (Reg. (EC) 648/2004):

not applicable

Dir. 2004/42/EC - VOC / Legislative Decree 161/2006:

not applicable

Substances subject to export notification (Regulation (EU) 649/2012):

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None
Health controls
Information not available
Classification for water pollution in Germany (AwSV, of 18 April 2017)
WGK 2: Hazardous to water

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16 OTHER INFORMATION

LEGEND:

- **ADR:** European Agreement concerning the International Carriage of Dangerous Goods by Road - CAS: Chemical Abstracts Service number - EC: Identification number in ESIS (European archive of existing substances)
- **CLP:** Regulation (EC) 1272/2008
- **DNEL:** Derived No Effect Level
- **EC50:** Concentration causing an effect in 50% of the tested population
- **EmS:** Emergency schedule
- **GHS:** Globally Harmonized System for the classification and labelling of chemicals
- **IATA DGR:** International Air Transport Association Dangerous Goods Regulations
- **IC50:** Immobilisation concentration for 50% of the tested population
- **IMDG:** International Maritime Dangerous Goods Code
- **IMO:** International Maritime Organization
- **INDEX:** Identification number in Annex VI of the CLP
- **LC50:** Lethal concentration 50%
- **LD50:** Lethal dose 50%
- **OEL:** Occupational exposure level
- **PBT:** Persistent, bioaccumulative and toxic according to REACH
- **PEC:** Predicted environmental concentration
- **PEL:** Predicted exposure level
- **PNEC:** Predicted no-effect concentration
- **REACH:** Regulation (EC) 1907/2006
- **RID:** Regulations concerning the International Carriage of Dangerous Goods by Rail
- **ATE:** Acute toxicity estimate
- **TLV:** Threshold limit value
- **TLV CEILING:** Concentration that must not be exceeded at any time during occupational exposure.
- **TWA:** Time-weighted average exposure limit
- **TWA STEL:** Short-term exposure limit
- **VOC:** Volatile organic compound
- **vPvB:** Very persistent and very bioaccumulative according to REACH
- **WGK:** Water hazard class (Germany).
- A1 = confirmed human carcinogen.
- A2 = suspected human carcinogen.
- A3 = confirmed animal carcinogen with unknown relevance to humans.
- A4 = not classifiable as a human carcinogen.
- A5 = not suspected as a human carcinogen.
- IBE = Substance with Biological Exposure Index.

GENERAL BIBLIOGRAPHY:

1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) 2020/878 (Annex II to the REACH Regulation)
4. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (EU) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (EU) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (EU) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (EU) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (EU) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (EU) 2022/692 (XVIII Atp. CLP)
The Merck Index. - 10th Edition
Handling Chemical Safety
INRS - Fiche Toxicologique (toxicological sheet)
Patty - Industrial Hygiene and Toxicology
N.I. Sax - Dangerous Properties of Industrial Materials-7, 1989 Edition
IFA GESTIS website
ECHA Agency website
Database of SDS models for chemical substances - Ministry of Health and Istituto Superiore di Sanità