WATER BASED ADHESIVE

SP-103
Wet Acrylic Adhesive

Water based adhesive based on a modified acrylic copolymer dispersion to laminate plastic films onto paper or cardboard.

- **Appearance:** White liquid of low viscosity.
- **Viscosity:** 14 – 16 s (Ford Cup 4 at 23ºC).
- **Total solids:** 47 – 50% approx.
- **pH: approx.** 4 – 6
- **Density: approx.** 1,05 g/m2
- **Dry film appearance:** Transparent, glossy and slightly sticky.

Applications

One component adhesive to laminate plastic films (polypropylene, acetate, polyester, etc.) in film laminating machines. Application by roller equipped with doctor blade. We recommend adjust the amount of adhesive according the work difficulties:

- between 12 and 16 g/m2 wet adhesive for gloss PP;
- between 20 and 26 g/m2 wet for matt PP and
- between 24 and 30 g/m2 wet for more difficult works or 12 g/m2 wet with 2-5% of VA-SP HARDER F addition.

Drying between 70 and 100ºC, calender between 50 and 80ºC and speed 35 - 70 m/min depending on length and type of drying tunnel.

When required, the hardener VA-SP HARDER F should slowly add into the glue with mechanical stirring, taking care not to foam and ensuring good homogenization; the mixture can be used without problems for 6 hours while maintaining its good features; After this time it is recommended to prepare a new mix.

Properties

The dried and crosslinked adhesive layer is transparent and colorless and has very good resistance to light and UV radiation. It has a very good adhesion on plastic sheets and excellent resistance to embossing, even after applying UV varnish reserves.

Recommendations

Lamination should be performed when printing inks are already sufficiently dry; otherwise subsequent delaminating problems may occur. Adhesive has tendency to form skins in the presence of air, so it must be:

- Avoid exposure of the adhesive to the air (well close adhesive containers; the can of glue used in machine must be well covered; the foam formed can cause the presence of small skins
- pay attention to the pump-, etc.).
- Avoid the long machine stop periods.
- To avoid the formation of foam in the glue tray, etc.

Before placing the adhesive in the tray is advisable filtration through a 50 micron mesh to retain the possible skins.

Manipulating of laminates is recommended after at least 24h.

It is very important to take all possible measures in the equipment to maintain it clean and to avoid problems. The cleaning of the waste of this adhesive can be easily simply by running water; it is more efficient if it can be hot.

Regulations

The vast majority of adhesives and products marketed by Samtack, SL are preparations and:

- These not have to be registered under REACH. However, all the substances in our products which are regulated by REACH have already been pre-registered or registered.
- These contain no more than 0.1% of any of the Substances of Very High Concern (SVHC) listed in Annex XIV or are on the list of candidates to it. Otherwise Samtack undertakes to inform all customers affected by the MSDS.

Following the criteria of Regulation (EC) No. 1935/2004, is considered that food packaging adhesive SP-103 represents no danger for health, even if combined with 2-5% of VA-SP HARDER F as a second component

Storage

Keep in its own original container tightly closed until its application at a temperature of 10 to 30°C. Protect from frost and especially their exposure to the outside. Its use is recommended before nine months after manufacture (see the package label).

GIF PRODUCTS

01844 208308 info@gifproducts.co.uk **www.gifproducts.co.uk**

Graphic Image Films Ltd. Unit 5 Ridge Way • Crendon Industrial Park • Long Crendon • Buckinghamshire • HP18 9BF

SP-103 SAFETY INFORMATION

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

1.1 Product identifier.

Product Name: SP-103

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

Adhesive for film print lamination.
Uses advised against: Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: Samtack, S.L.
Address: Cerámica 3 Pol. Ind. Magarola Sud
City: 08292 Esparreguera
Province: BARCELONA

Telephone: 00-34-937708489
Fax: 00-34-937777565
E-mail: samtack@samtack.es

1.4 Emergency telephone number:
(93) 770 84 89 (Only available during office hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the mixture.
In accordance with Regulation (EU) No 1272/2008:
Skin Sens. 1 : May cause an allergic skin reaction.

2.2 Label elements.
Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:

Signal Word:
Warning

H statements:
H317 May cause an allergic skin reaction.

P statements:

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water
P321	Specific treatment (see label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to...

EUH statements:

EUH208	Contains 1,2-benzisothiazol-3(2H)-one,1,2-benzisothiazolin-3-one. May produce an allergic reaction.
EUH208	Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.Contains: 2-methyl-2H-isothiazol-3-one

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

IDENTIFIERS	NAME	CONCENTRATE	CLASSIFICATION	(*)Classification - Regulation (EC) No 1272/2008 SPECIFIC CONCENTRATION LIMIT
: 57-55-6 : 200-338-0 : 01-2119456809-23-XXXX	[1] Propylene glycol	0 – 2.5%	–	–
: 603-014-00-0 : 111-76-2 : 203-905-0 : 01-2119475108-36-XXXX	[1] 2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether	0 – 10%	Acute Tox. 4 *, H312 Acute Tox. 4 *, H332 Acute Tox. 4 *, H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315	–
: 603-002-00-5 : 64-17-5 : 200-578-6 : 01-2119457610-43-XXXX	[1] ethanol, ethyl alcohol	0 – 2.5%	Flam. Liq. 2, H225	–
: 613-088-00-6 : 2634-33-5 : 220-120-9 : 01-2120761540-60-XXXX	1.2-benzisothiazol-3(2H)-one, 1.2-benzisothiazolin-3-one	0 – 0.05%	Acute Tox. 4 *, H302 Aquatic Acute 1, H400 Eye Dam. 1, H318 Skin Irrit. 2, H315 Skin Sens. 1, H317	Skin Sens. 1, H317: C ≥ 0,05 %
: 2682-20-4 : 220-239-6 : 01-2120764690-50-XXXX	2-methyl-2H-isothiazol-3-one	0.0015 – 0.1%	Acute Tox. 2, H330 Acute Tox. 3, H311 Acute Tox. 3, H301 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 Skin Corr. 1B, H314 Skin Sens. 1A, H317	Skin Sens. 1, H317: C ≥ 0,0015 %
: 613-167-00-5 : 55965-84-9	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	0 – 0.0015%	Acute Tox. 3 *, H311 Acute Tox. 3 *, H331 Acute Tox. 3 *, H301 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Skin Corr. 1B, H314 Skin Sens. 1, H317	Skin Corr. 1B, H314: C ≥ 0,6% Skin Irrit. 2, H315: 0,06 % ≤ C < 0,6% Eye Irrit. 2, H319: 0,06% ≤ C < 0,6% Skin Sens. 1, H317: C ≥ 0,0015%

*(*)The complete text of the H phrases is given in section 16 of this Safety Data Sheet. * See Regulation (EC) No. 1272/2008, Annex VI, section 1.2.*

[1] Substance with a Community workplace exposure limit (see section 8.1).

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation. Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact. Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact. Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner.
NEVER use solvents or thinners.

Ingestion. If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

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

It may cause an allergic reaction, dermatitis, redness or inflammation of the skin.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. If the person vomits, clear the respiratory tract. Keep the person comfortable. Turn him/her over to the left side and stay there while waiting for medical care.

SECTION 5: FIREFIGHTING MEASURES

The product does not present any particular risk in case of fire.

5.1 Extinguishing media.

Suitable extinguishing media: Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media: Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the mixture.

Special risks. Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.

Fire protection equipment. According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Pick up the spill with non-combustible absorbent materials (soil, sand, vermiculite, diatomite, etc.). Pour the product and the absorbent in an appropriate container. The contaminated area should be immediately cleaned with an appropriate de-contaminator. Pour the decontaminator on the remains in an opened container and let it act various days until no further reaction is produced.

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling.

For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers. In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 10 and 30º C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters. Work exposure limit for:

NAME	CAS NO.	COUNTRY	LIMIT VALUE	PPM	MG/M3
Propylene glycol	57-55-6	United Kingdom [1]	Eight hours	150 (total vapour and particulares)	474 (total vapour and particulares) 10 (particulates)
			Short term		
2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether	111-76-2	European Union [2]	Eight hours	20 (skin)	98 (skin)
			Short term	50 (skin)	246 (skin)
		United Kingdom [1]	Eight hours	25	123
			Short term	50	246
		United States [3] (Cal/OSHA)	Eight hours	20	
			Short term		
		United States [4] (NIOSH)	Eight hours	5	
			Short term		
		United States [5] (OSHA)	Eight hours	50	240
			Short term		
ethanol,ethyl alcohol	64-17-5	United Kingdom [1]	Eight hours	1000	1920
			Short term		
		United States [3] (Cal/OSHA)	Eight hours	1000	
			Short term		
		United States [4] (NIOSH)	Eight hours	1000	
			Short term		
		United States [5] (OSHA)	Eight hours	1000	1900
			Short term		

[1] According Limit Value (IOELV) list in 2nd Indicative Occupational Exposure adobted by Health and Safety Executive.
[2] According both Binding Occupational Esposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).
[3] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).
[4] National Institute for Occupational Safety and Health. NIOSH Recommendations for occupational safety and health, Compendium of Policy Documents and Statements, January, 1992, DHHS (NIOSH) Publication No. 92-100.
[5] Occupational Safety and Health Administration, United States Department of Labor. Permissible Exposure limits (PELs), California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

NAME	DNEL/DMEL	TYPE	VALUE
Propylene glycol CAS No: 57-55-6 EC No: 200-338-0	DNEL (Workers)	Inhalation, Long-term, Local effects	10 (mg/m³)
	DNEL (Workers)	Inhalation, Long-term, Systemic effects	168 (mg/m³)
2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether CAS No: 111-76-2 EC No: 203-905-0	DNEL (Workers)	Inhalation, Long-term, Systemic effects	98 (mg/m³)
ethanol, ethyl alcohol CAS No: 64-17-5 EC No: 200-578-6	DNEL (Workers)	Inhalation, Long-term, Systemic effects	950 (mg/m³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

Concentration levels PNEC:

NAME	DETAILS	VALUE
ethanol,ethyl alcohol CAS No: 64-17-5 EC No: 200-578-6	Fresh water	0.96 (mg/L)
	Marine water	0.79 (mg/L)
	aqua (intermittent releases)	2.75 (mg/L)
	Soil	0.63 (mg/kg soil dw)
	sediment (freshwater)	3.6 (mg/kg sediment dw)

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

8.2 Exposure controls.
Measures of a technical nature:
Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

CONCENTRATION: 100 %	USES: ADHESIVE FOR FILM PRINT LAMINATION.
Breathing protection:	If the recommended technical measures are observed, no individual protection equipment is necessary.
Hand protection:	If the product is handled correctly, no individual protection equipment is necessary.
Eye protection:	If the product is handled correctly, no individual protection equipment is necessary.
Skin protection:	PPE: Work footwear. Characteristics: «CE» marking, category II. CEN standards: EN ISO 13287, EN 20347 Maintenance: This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should not be used by other people. Observations: Work footwear for professional use includes protection elements aimed at protecting users against any injury resulting from an accident

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties.

Appearance: White liquid with characteristic odour
Colour: White
Odour: N.A./N.A.
Odour threshold: N.A./N.A.
pH: 4 – 6
Melting point: N.A./N.A.
Boiling Point: Approx. 100ºC (as water)
Flash point: > 60 ºC
Evaporation rate: N.A./N.A.
Inflammability (solid, gas): N.A./N.A.
Lower Explosive Limit: N.A./N.A.
Upper Explosive Limit: N.A./N.A.
Vapour pressure: 23 mbar a 20ºC (as water)
Vapour density: N.A./N.A.
Relative density: N.A./N.A.
Solubility: Not soluble in greater part of solvents
Liposolubility: N.A./N.A.
Hydrosolubility: Full miscible
Partition coefficient (n-octanol/water): N.A./N.A.
Auto-ignition temperature: N.A./N.A.
Decomposition temperature: N.A./N.A.
Viscosity Ford Cup 4: 14 – 16 sec. at 23ºC
Explosive properties: N.A./N.A.
Oxidizing properties: N.A./N.A.
N.A./N.A.= Not Available/Not Applicable due to the nature of the product.

9.2 Other information.

Pour point: N.A./N.A.
Blink: N.A./N.A.
Kinematic viscosity: N.A./N.A.
N.A./N.A.= Not Available/Not Applicable due to the nature of the product

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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity.

The product does not present hazards by their reactivity.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

The product does not present possibility of hazardous reactions.

10.4 Conditions to avoid. Avoid any improper handling.

10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION

2-butoxyethanol and its acetate are easily absorbed by the skin and can cause noxious effects to the kidneys.

11.1 Information on toxicological effects.

There are no tested data available on the product.

Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.

Splatters in the eyes can cause irritation and reversible damage.

a) acute toxicity; Not conclusive data for classification.
b) skin corrosion/irritation; Based on available data, the classification criteria are not met.
c) serious eye damage/irritation; Based on available data, the classification criteria are not met.
d) respiratory or skin sensitisation; Product classified: Skin sensitiser, Category 1: May cause an allergic skin reaction.
e) germ cell mutagenicity; Not conclusive data for classification.
f) carcinogenicity; Not conclusive data for classification.
g) reproductive toxicity; Not conclusive data for classification.
h) STOT-single exposure; Not conclusive data for classification.
i) STOT-repeated exposure; Not conclusive data for classification.
j) aspiration hazard; Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity.

There is no information available on the biodegradability of the substances present.

12.2 Persistence and degradability.

There is no information available on the degradability of the substances present.

No information is available regarding the degradability of the substances present.No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

Information about the bioaccumulation of the substances present.

NAME	BIOACCUMULATION			
	Log Pow	BCF	NOECs	Level
2-butoxyethanol, butyl cellosolve, ethylene glycol monobutyl ether N. CAS: 111-76-2 EC No: 203-905-0	0.8	–	–	Very Low
ethanol, ethyl alcohol N. CAS: 64-17-5 EC No: 200-578-6	-0.3	–	–	Very Low

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6.

14.1 UN number.

Transportation is not dangerous.

14.2 UN proper shipping name.

Description:
ADR: Transportation is not dangerous.
IMDG: Transportation is not dangerous.
ICAO/IATA: Transportation is not dangerous.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

14.6 Special precautions for user.

Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.

Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION

Complete text of the H phrases that appear in section 3:

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes severe skin burns and eye damage. Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Classification codes:

Acute Tox. 2:	Acute toxicity (Inhalation), Category 2
Acute Tox. 3:	Acute toxicity (Dermal), Category 3
Acute Tox. 3:	Acute toxicity (Inhalation), Category 3
Acute Tox. 3:	Acute toxicity (Oral), Category 3
Acute Tox. 4:	Acute toxicity (Dermal), Category 4
Acute Tox. 4:	Acute toxicity (Inhalation), Category 4
Acute Tox. 4:	Acute toxicity (Oral), Category 4
Aquatic Acute 1:	Acute toxicity to the aquatic environment, Category 1
Aquatic Chronic 1:	Chronic effect to the aquatic environment, Category 1
Eye Dam. 1:	Serious eye damage, Category 1
Eye Irrit. 2:	Eye irritation, Category 2
Flam. Liq. 2:	Flammable liquid, Category 2
Skin Corr. 1B:	Skin Corrosive, Category 1B
Skin Irrit. 2:	Skin irritant, Category 2
Skin Sens. 1:	Skin sensitiser, Category 1
Skin Sens. 1A:	Skin sensitiser, Category 1A

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

BCF:	Bioconcentration factor.
CEN:	European Committee for Standardization.
DMEL:	Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL:	Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50:	Half maximal effective concentration. Personal protection equipment. Lethal concentration, 50%.
LD50:	Lethal dose, 50%.
Log Pow:	Logarithm of the partition octanol-water.
NOEC:	No observed effect concentration.
PNEC:	Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

Key literature references and sources for data: http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/
Regulation (EU) 2015/830. Regulation (EC) No 1907/2006. Regulation (EU) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.