

SAFETY DATA SHEET (IN ACCORDANCE WITH REGUALTION (UE) 2015/830)

**VINIGRAPH 40 PLUS RESIN** 

Safety Data Sheet (in accordance with the Safety Data Sheet Regulation) (UE) 2015/830)

# **VINILGRAPH 40 PLUS RESIN**

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE COMPANY OR FIRM.

# 1.1 Product identifier.

Product name: VINILGRAPH 40 PLUS RESIN

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

Polyester resin for composite materials.

# Not recommended uses:

Uses other than those recommended.

# 1.3 Safety data sheet supplier information.

Company::GRAPHENANO COMPOSITES SLAddress:C/ Pablo Casals nº 13 bajoCity:YeclaProvince:MurciaTelephone:965 108 102E-mail:info@graphenanocomposites.comWeb:www.graphenanocomposites.com

1.4 Emergency telephone: + 34 91 562 04 20 (Available 24h)

# SECTION 2: HAZARD IDENTIFICATION.

# 2.1 Classification of the substance or mixture. In accordance with regulation (EU) No: 1272/2008: Acute Tox. 4 : Harmful if inhaled. Eye Irrit. 2 : Causes severe eye irritation. Flam. Liq. 3 : Flammable liquids and vapours. Repr. 2 : Suspected of impairing fertility or harming the fetus.

STOT RE 1 : Causes organ damage after prolonged or repeated exposures.

Skin Irrit. 2 : Causes skin irritation.

# 2.2 Label elements.

Labeling according to the Regulation (EU) No 1272/2008:

Pictograms







# Word of caution:

# Danger:

<u>H phrases:</u>	
H226	Flammable liquids and vapors.
H315	Causes skin irritation.
H319	Causes severe eye irritation.
H332	Harmful if inhaled.
H361d	Suspected of damaging the fetus.
H372	Causes organ damage after prolonged or repeated exposures

# P phrases:

P201	Ask for special instructions before use.	
P210	Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Do not smoke.	
P260	Do not breathe dust/smoke/gas/mist/mist/fumes/spray.	
P280	Wear protective gloves/protective clothing/eye/face/ear protection equipment/	
P370+P378 In case of fire: Use for fire extinguishing.		
P403+P235 To be stored in a well ventilated place. Keep in a cool place.		
P501 Disposal of contents or container in		

# Additional hazard statements:

EUH208 Contains cobalt bis(2-ethylhexanoate). May cause allergic reaction.

# **Contains:**

Styrene.

# 2.3 Other hazards:

The product may present the following additional risks:

Under normal conditions of use and in its original form, the product has no other negative effects on health and the environment.

# SECTION 3: COMPOSITION/INFORMATION ON COMPONENTS.

# 3.1 Substance.

Not applicable.

### 3.2 Mixtures.

Substances that represent a health or environmental hazard in accordance with the Regulation. (CE) No. 1272/2008, are assigned a community workplace exposure limit, are classified as PBT/vPvB or are included on the Candidate List:





			(*)Classification- Regulation 1272/2008		
Identifiers	Name	Concentrate	Classification	Specific concen- tration limits	
Index no: 601-026- 00-0 CAS no: 100-42-5 CE no: 202-851-5 Register no: 01- 2119457861-32-XXXX	[1] styrene	>= 25% < 50%	Acute Tox. 4 *, H332 - Eye Irrit. 2, H319 - Flam. Liq. 3, H226 - Repr. 2, H361d - STOT RE 1, H372(hearing organs) - Skin Irrit. 2, H315	-	
CAS No.: 136-52-7 CE No.: 205-250-6 Register No.: 01- 2119524678-29-XXXX	cobalt bis(2-ethylhexanoate)	< 2,5%	Aquatic Acute 1, H400 - Aquatic Chronic 3, H412 - Repr. 2, H361 - Skin Irrit. 2, H315 - Skin Sens. 1, H317	-	
N. CAS: 1034343-98-0	graphene fibers	< 0,5%	Eye irrit, H319 - Respiratory tract irrit, H335	-	

(\*) El texto completo de las frases H se detalla en la sección 16 de esta Ficha de Seguridad.

\* Consultar Reglamento (CE) Nº 1272/2008, Anexo VI, sección 1.2.

[2] Substance to which a community workplace exposure limit applies (see section 8.1).

# SECTION 4: FIRST AIDS.

IRRITANT MIXTURE. Repeated or prolonged contact with skin or mucous membranes may cause irritating symptoms such as redness, blistering or dermatitis. Some of the symptoms may not be immediate. Allergic skin reactions may occur.

# 4.1 Description of first aid.

Delayed effects may occur after exposure to the product.

# Inhalation.

Place the injured person in the open air, keep warm and at rest, if breathing is irregular or stops, practice artificial respiration. Do not administer anything by mouth. If unconscious, place in a suitable position and seek medical help. It is recommended that first aid providers wear personal protective equipment (see section 8).

# Eye contact.

If present and easy to do, remove contact lenses. Flush eyes thoroughly with clean, cool water for at least 10 minutes, pulling up the eyelids and seek medical attention. Do not allow the person to rub the affected eye.

# Skin contact.

Removal of contaminated clothing. Wash skin vigorously with soap and water or a suitable skin cleanser. NEVER use solvents or thinners.

# Ingestion.

If accidentally swallowed, seek medical attention immediately. Keep at rest. NEVER induce vomiting.

# 4.2 Main acute and delayed symptoms and effects.

Irritant product, repeated or prolonged contact with skin or mucous membranes may cause redness, blistering or dermatitis, inhalation of spray mist or airborne particles may cause respiratory tract irritation, some symptoms may not be immediate.

Harmful product, prolonged exposure by inhalation may cause anesthetic effects and the need for immediate medical attention.





Long-term chronic exposure may cause injury to certain organs or tissues.

### 4.3 In Indication of any medical care and special treatment that should be given immediately.

In cases of doubt, or when symptoms of discomfort persist, seek medical attention. Never administer anything by mouth to an unconscious person. Keep the person comfortable. Always turn the person onto their left side and remain there while waiting for medical help.

# SECTION 5: FIRE FIGHTING MEASURES.

Flammable product, necessary prevention measures must be taken to avoid risks, in case of fire the following measures are recommended:

### 5.1 Extinguishing media.

# Suitable extinguishing media:

Extinguishing powder or CO2. In case of more serious fires also alcohol-resistant foam and water spray.

### Not suitable extinguishing media:

Do not use for extinguishing direct water jet. In the presence of electrical voltage it is not acceptable to use water or foam as extinguishing media.

### 5.2 Special hazards arising from the substance or mixture.

### Special hazards.

Fire may produce thick black smoke. As a result of thermal decomposition, hazardous products may be formed: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products may be harmful to health.

During a fire and depending on its magnitude can be produced:

- Flammable vapors or gases.

### 5.3 Recommendations for firefighters.

The tanks, cisterns or containers close to the source of heat or fire should be cooled with water. Take into account the wind direction. Prevent products used in firefighting from entering drains, sewers or watercourses. Following the instructions described in the fire emergency and evacuation plan(s), if available.

### Fire protection equipment.

Depending on the magnitude of the fire, heat protection suits, self-contained breathing apparatus, gloves, goggles or face masks and boots may be required. During extinguishing and depending on the magnitude and proximity to the fire, additional protective equipment such as chemical protective gloves, thermo-reflective suits or gas-tight suits may be necessary.

# SECTION 6: MEASURES IN CASE OF ACCIDENTAL SPILLAGE.

### 6.1 Personal precautions, protective equipment and emergency procedures.

The area must be ventilated. To eliminate possible ignition points and electrostatic charges, ventilate the area. Do not smoke. Avoid breathing vapors. For exposure control and personal protective measures, see section 8.

### 6.2 Environmental precautions.

Contamination of drains, surface and groundwater, and soil is avoided.

### 6.3 Containment and cleaning methods and materials.

Immediately contain and collect spillage with inert absorbent material (earth, sand, vermiculite, diatomaceous earth...) and clean up the area with a suitable decontaminant.





Dispose of waste in closed containers suitable for disposal in accordance with local and national regulations (see section 13).

# 6.4 Reference to other sections.

For exposure control and personal protective measures, see section 8. For waste disposal, follow the recommendations in section 13.

# SECTION 7: HANDLING AND STORAGE.

# 7.1 Precautions for safe handling.

Vapors are heavier than air and may spread on the ground. May form explosive mixtures with air. Do not create flammable or explosive vapor concentrations in air; avoid vapor concentrations above exposure limits during work. The product should only be used in areas where unprotected flames and other ignition points have been eliminated. Electrical equipment must be protected according to the appropriate standards.

The product can be electrostatically charged: always use grounding points when transferring the product. Operators should wear antistatic footwear and clothing, and floors should be conductive.

Keep container tightly closed, isolated from sources of heat, sparks and fire. Do not use tools that can produce sparks.

The product should not come into contact with the skin and eyes. Avoid inhalation of vapor and mists produced during spraying. For personal protection, see section 8.

Smoking, eating and drinking must be prohibited in the application area. Comply with occupational health and safety legislation.

Never use pressure to empty the containers, they are not pressure resistant containers. Keep the product in containers made of a material identical to the original one.

# 7.2 Conditions for safe storage, including possible incompatibilities.

Storage in accordance with local legislation. The label instructions must be observed. Storage of containers should be between 5 and 25°C, in a dry and well ventilated place, away from heat sources and direct sunlight. Keep away from ignition points. Keep away from oxidizing agents and strongly acidic or alkaline materials. No smoking. Keep away from unauthorized persons. After opening, containers should be carefully resealed and placed upright to avoid spillage.

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

# 7.3 Specific end uses.

Not available.

# SECTION 8: EXPOSURE CONTROLS/INDIVIDUALS PROTECTION.

# 8.1 Control parameters.

# Occupational exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m <sup>3</sup>
Character and the second se	100-42-5	Spain [1]	Eight hours	20	86
Styrene			Short term	40	172

# Biological exposure limit values for:

Name	CAS No.	Country	<b>Biological indicator</b>	VLB	mg/m³
Styrene	100-42-5	Spain [1]	Mandelic acid plus Phenylglyoxylic acid in urine	400 mg/g creatinine	End of wor- king day
		Spain [1]	Styrene in venous blood	0,2 mg/l	End of wor- king day





[1] According to the list of Environmental Occupational Exposure Limit Values adopted by the National Institute for Safety and Health at Work (INSST) for the year 2018.

# **Concentration levels DNEL/DMEL:**

Name	DNEL/DMEL	Туре	Value
styrene N. CAS: 100-42-5 N. CE: 202-851-5	DNEL (Trabajadores)	Inhalation, Chronic, Systemic Effects	85 (mg/m³)
bis(2-ethylhexanoate) cobalt N. CAS: 136-52-7 N. CE: 205-250-6	DNEL (Trabajadores)	Inhalation, Chronic, Systemic Effects	0,2351 (mg/m <sup>3</sup> )

DNEL: Derived No Effect Level, level of exposure to the substance below which no adverse effects are anticipated. DMEL: Derived Minimal Effect Level, level of exposure corresponding to a low risk, which should be considered a minimum tolerable risk.

# 8.2 Exposure controls.

# Technical measures:

Provide adequate ventilation, which can be achieved through good local exhaust-ventilation and a good general exhaust system.

Concentrated:	100%
Uses:	Polyester resin for composite materials
Respiratory protect	ion:
PPE:	Filtering mask for protection against gases and particulates
Characteristics:	CE marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.
CEN standards:	EN 136, EN 140, EN 405
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.
Filter type needed:	A2
Hand protection:	
PPE:	
	Non-disposable protective gloves against chemicals
Characteristics:	CE Marking Category III. The list of chemicals against which the glove has been tested should be reviewed.
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420



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	A schedule for the periodical replacement of gloves should be established in order to guarantee their replacement
Maintenance:	before pollutants permeate them. The use of contaminated gloves could be more dangerous than not using gloves, since the pollutant can gradually accumulate in the glove's material.
Observations:	They are to be replaced whenever tears, cracks or deformations are observed or when exterior dirt could reduce their strength.
Material:	PVC (Polyvinyl chloride)   Breakthrough time (min.): > 480   Material thickness (mm): 0,35
Eye protection:	
PPE:	
	Safety spectacles with integral frame
Characteristics:	CE marking Category II. Integtral frame eye protection for protection against liquid splashes, dust, fumes, mists and vapors.
CEN standards:	EN 165, EN 166, EN 167, EN 168
Maintenance:	Visibility through the eyepieces must be optimal, for which these elements must be cleaned daily, the protectors mus be disinfected periodically following the manufacturer's instructions.
Observations:	Indicators of deterioration can be: yellowing of the eyepieces, superficial scratches on the eyepieces, tears, etc.
Skin protection:	
PPE:	
	Chemical protective clothing
Characteristics:	CE marking, category III. Clothing should fit properly. The level of protection must be set according to a test paramete called BT (Breakthrough Time), which indicates how long it takes for the chemical to pass through the material.
CEN standards:	EN 464,EN 340, EN 943-1, EN 943-2, EN ISO 6529, EN ISO 6530, EN 13034
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.
Observations:	The protective clothing's design should facilitate correct positioning, staying in place without moving for the period o use expected, bearing in mind environmental factors as well as any movement or position the user might adopt while carrying out the activity.
PPE:	Anti-static safety footwear against chemicals
Characteristics:	CE marking, category III. Check the list of chemicals against which the footwear is resistant. Normas CEN: EN ISO.
CEN standards:	EN ISO 13287, EN 13832-1, EN 13832-2, EN 13832-3, EN ISO 20344, EN ISO 20345
Maintenance:	For correct maintenance of this kind of safety footwear, it is necessary to observe the instructions specified by the manufacturer. The footwear should be replaced as soon as any sign of damage is observed.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

# 9.1 Information on basic physical and chemical properties.

Appearance: Liquid of characteristic odour Colour: Dark Odour:Typical of styrene Olfactory threshold:N.D./N.A. pH:N.D./N.A. Melting Point:N.D./N.A. Boiling point/boiling range: 145 °C Flash point: 41 °C Evaporation rate: N.D./N.A.





Flammability (solid, gas): N.D./N.A. Lower explosion limit: N.D./N.A. Upper explosion limit: N.D./N.A. Vapour pressure: 6,34 Vapour density: N.D./N.A. Relative density: 1,2 - 1,6 kg/m3 Solubility: N.D./N.A. Liposolubility: N.D./N.A. Water solubility: N.D./N.A. Partition coefficient (n-octanol/water): N.D./N.A. Auto-ignition temperature: N.D./N.A. Decomposition temperature: N.D./N.A. Viscosity: N.D./N.A. Explosive properties: N.D./N.A. Oxidizing properties: N.D./N.A. N.D./N.A.= Not Available/Not Applicable due to nature of product.

# 9.2 Other information.

Drop point: N.D./N.A. Scintillation: N.D./N.A. Kinematic viscosity: N.D./N.A. % Solids: N.D./N.A. N.D./N.A.= Not Available/Not Applicable due to nature of product.

# SECTION 10: STABILITY AND REACTIVITY.

# 10.1 Reactivity.

If the storage conditions are satisfied, does not produce dangerous reactions.

# 10.2 Chemical stability.

Unstable in contact with:

- Acids.
- Bases.
- Oxidizing agents.

# 10.3 Possibility of hazardous reactions.

Flammable liquid and vapour.

In certain conditions this may cause a polymerization reaction.

# 10.4 Conditions to avoid.

Avoid the following conditions:

- Heating.
- High temperature.
- Static discharge.
- Contact with incompatible materials.

- Avoid temperatures near or above the flash point. Do not heat closed containers. Avoid direct sunlight and heat, as these may cause a risk of fire.





# 10.5 Incompatible materials.

Avoid the following materials:

- Acids.
- Bases.
- Oxidizing agents.
- Explosives materials.
- Toxic materials.
- Oxidizing materials.

### 10.6 Hazardous decomposition products.

Depending on conditions of use, can be generated the following products:

- COx (carbon oxides).
- Organic compounds.
- Aromatics compounds.

In case of fire, dangerous decomposition products can be generated, such as carbon monoxide and dioxide and nitrogen fumes and oxides.

# SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT MIXTURE. Splashes in the eyes may cause eye irritation.

IRRITANT MIXTURE. Repeated or prolonged contact with skin or mucous membranes may cause irritating symptoms such as redness, blistering or dermatitis. Some of the symptoms may not be immediate. Allergic skin reactions may occur.

# 11.1 Information on hazard classes as defined in Regulation (CE) no. 1272/2008.

There are no tested data available on the product.

Repeated or prolonged contact with the product may cause removal of oil from the skin, resulting in non-allergic contact dermatitis and absorption of the product through the skin.

# a) acute toxicity;

Product classified: Acute toxicity (Inhalation), Category 4: Harmful if inhaled.

Acute Toxicity Estimate (ATE): Mixtures: ATE (Inhalation) = 11 mg/l/4 h (Vapours)

# b) skin corrosion or irritation;

Classified product: Skin irritant, Category 2: Causes skin irritation.

# c) serious eye damage or eye irritation;

Product classified: Eye irritation, Category 2: Causes serious eye irritation.

d) respiratory or skin sensitization; Based on available data, the classification criteria are not met.

# e) germ cell mutagenicity;

Not conclusive data for classification.







# f) carcinogenicity;

Not conclusive data for classification.

# g) reproductive toxicity;

Product classified: Reproductive toxicant, Category 2: Suspected of damaging fertility or the unborn child.

# h) specific target organ toxicity (STOT) - single exposure;

Inconclusive data for classification.

# i) Specific target organ toxicity (STOT) - repeated exposure;

Product classified:

Specific target organ toxicity after repeated exposure, Category 1: Causes damage to organs after prolonged or repeated exposure.

# j) aspiration hazard;

Inconclusive data for classification.

# SECTION 12: ECOLOGICAL INFORMATION.

# 12.1 Toxicity.

No information is available regarding the Ecotoxicity of the substances present.

# 12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present. No information is available on 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
Styrene		3,05			Moderate
N. CAS: 100-42-5	N. CE: 202-851-5CE50	3,05	-	-	Moderate

# 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 Endocrine disrupting properties.

This product doesn't contain components with environmental endocrine disrupting properties.





# 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.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/ IATA for air transport. Land: Transport by road: ADR, Transport by rail: RID. Transport documentation: Consignment note and written instructions Sea: Transport by ship: IMDG. Transport documentation: Bill of lading Air: Transport by plane: ICAO/IATA. Transport document: Airway bill.

# 14.1 UN number.

UN No.: UN1866

# 14.2 UN proper shipping name.

Description: ADR/RID: UN 1866, RESIN, SOLUTIONS, 3, GE III, (E) IMDG: UN 1866, RESIN, SOLUTIONS, 3, GE/E III ICAO/IATA: UN 1866, RESIN, SOLUTIONS , 3, GE III

# 14.3 Transport hazard class(es).

Class(es): 3

# 14.4 Packaging group.

Packaging group: III

# 14.5 Environmental hazards.

Marine pollutant: No

### 14.6 Special precautions for user.

Labels: 3



Hazard number: Not applicable. ADR limited quantity: 5 L IMDG limited quantity: 5 L ICAO limited quantity: 10 L





Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR. Transport by ship, FEm - Emergency sheets (F - Fire, S - Spills): F-E,S-E Act according to point 6.

# 14.7 Carriage in bulk under Annex II of MARPOL and the IBC Code.

The product is not affected by bulk transport in ships.

# SECTION 15: REGULATORY INFORMATION.

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

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

Volatile organic compound (VOC)

Subcategory of product (Directive 2004/42/EC): E - Special finishes (All types) Phase I \* (as of 01/01/2007): 840 g/l

Phase II\* (as of 01/01/2010): 840 g/l (\*) g/l ready for use

VOC content (p/p): 55 % VOC content: 550 g/l

The provisions of the VOC Directive 2004/42/EC apply to this product. Refer to the product label and/or safety data sheet for more information.

Classification of the product according to Annex I of the Directive 2012/18/UE (SEVESO III): N/A

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

The product is not affected by the procedure laid down in 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:

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Causes serious eye irritation.
- H361 Suspected of impairing fertility or harming the fetus.
- H361d Suspected of harming the fetus.
- H372 Causes damage to organs <indicate all organs affected, if known> after prolonged or repeated exposures <indicate route of exposure if it has been conclusively demonstrated that the hazard does not occur by any other route> (hearing organs).
- H400 Very toxic to aquatic organisms.
- H412 Harmful to aquatic organisms, with long lasting harmful effects.

# **Classification codes:**

Acute Tox. 4 : Acute toxicity (Dermal), Category 4

Aquatic Acute 1 : Acute Toxicity to the Aquatic Environment, Category 1 Aquatic Chronic 3 : Chronic effects to the aquatic environment, Category 3 Eye Irrit. 2 : Eye irritation, Category 2

Flam. Liq. 3 : Flammable liquid, Category 3 Repr. 2 : Toxic for reproduction, Category 2

STOT RE 1: Toxicity to specific target organs after repeated exposure, Category 1 Skin Irrit. 2 : Skin irritant, Category 2





Skin Sens. 1 : Skin sensitiser, Category 1

# Modifications with respect to the previous version:

- Change of the product name (SECTION 1.1).
- Change of the uses of the product (SECTION 1.2).

# Classification and procedure used to derive the classification for mixtures according to Regulation (CE) no 1272/2008 [CLP]:

Physical hazards On basis of test data Health hazards Calculation method Environmental hazards Calculation method

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:

ADR/RID:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
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:	Average effective concentration.
PPE:	Personal protection equipment.
IATA:	International Air Transport.
ICAO:	International Civil Aviation Organization.
IMDG:	International Maritime Code for Dangerous Goods. LC50: Lethal concentration, 50%.
LD50:	Lethal Dose, 50%.
NOEC:	No observed effect concentration.
RID:	Regulations Concerning the International Transport of Dangerous Goods by Rail.

# Main bibliographic references and data sources:

http://eur-lex.europa.eu/homepage.html http://echa.europa.eu/ Regulation (UE) 2020/878. Regulation (CE) No 1907/2006. Regulation (CE) No 1272/2008.

The information provided in this Safety Data Sheet has been drawn up in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II of Regulation (CE)

No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

The information in this Material Safety Data Sheet is based on current knowledge and current EC and national laws, in that the working conditions of the users are beyond our knowledge and control. The product must not be used for purposes other than those specified without first having written instruction in its handling. It is always the responsibility of the user to take appropriate measures in order to comply with the requirements laid down in the relevant legislation.

