NEUCE O FUTURO DA TINTA

DILUENTE FLOOR
Code: 01390000

Version: 4 Revision: 17/02/2020 Previous revision: 05/06/2017 Date of printing: 17/02/2020

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

1.1 PRODUCT IDENTIFIER: DILUENTE FLOOR
CAS: 108-65-6 , EC: 203-603-9 Code: 01390000
REACH REGISTER:
Register name: 2-methoxy-1-methylethyl acetate
Register number: 01-2119475791-29

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST:
Intended uses (main technical functions): [X] Industrial [X] Professional
 # Thinner for the application of paints and varnishes.
Sectors of use (use as such or as a ingredient in mixtures):
 # Industrial manufacturing (SU3), industrial.
 # Printing and reproduction of recorded media (SU7), industrial, professional.
 # Manufacture of bulk, large scale chemicals (SU8), industrial.
 # Manufacture of fine chemicals (SU9), industrial.
 # Formulation (mixing) of preparations and/or re-packaging (SU10), industrial, professional.
 # Consumer uses (SU21), consumers.
 # Professional uses (SU22), professional.
Use in manufacture, formulation or application processes (relevant uses):
 # Manufacture of the substance, industrial.
 # Distribution of the substance, industrial.
 # Formulation of mixtures and/or re-packaging, industrial.
 # Use as process solvent, industrial.
 # Use in coatings, industrial, professional, consumers.
 # Use in printing inks, industrial.
 # Use in cleaning agents, industrial, professional, consumers.
 # Use in agrochemical sector, professional, consumers.
Use in products (relevant product categories):
 # Coatings and paints, thinners, paint removers (PC9a). Ink and toners (PC18). Plant protection products (PC27). Washing and cleaning products (PC35).
Uses advised against:
 # This product is not recommended for any use or sector of use (industrial, professional or consumer) other than those previously listed as 'Intended or identified uses'. For professional use only.
Restrictions on manufacture, placing on market and use, according to Annex XVII of Regulation (EC) No. 1907/2006:
 # Restricted to professional users. Contains CMR substances, categories 1A or 1B: Restricted to professional users. Forbidden to the general public. Consult possible exemptions to these restriction in entries 28, 29 and 30 in the Annex of the Regulation (EC) No. 552/2009 concerning to: a) medicinal or veterinary products, b) cosmetic products, c) certain fuels and oil products, or d) artists´ paints. The restrictions do not apply to storage, keeping, treatment, filling into containers, or transfer from one container to another of the substances for export. See entry 28 and/or 29 and/or 30 in the Annex of the Regulation (EC) No. 552/2009~276/2010.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:
NEUCE - Indústria de Tintas, S.A.
Rua Francisco Rocha - Aptdo.4514 - 3700-892 - Romariz SJM (Portugal)
Phone: +351 256 840040 - Fax: +351 256 840049
E-mail address of the person responsible for the Safety Data Sheet:
e-mail: geral@neuce.pt

1.4 EMERGENCY TELEPHONE NUMBER: +351 256 840041 (9:00-18:30 h.) (working hours)

SECTION 2 : HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

 # Classification in accordance with Regulation (EU) No. 1272/2008~2018/1480 (CLP):
DANGER: Flam. Liq. 3:H226 | Repr. 1B:H360D | STOT SE (narcosis) 3:H336

Danger class	Classification of the substance	Cat.	Routes of exposure	Target organs	Effects
Physicochemical: 	Flam. Liq. 3:H226 Repr. 1B:H360D STOT SE (narcosis) 3:H336	Cat.3 Cat.1B Cat.3	- . Inhalation	- Reproductive system CNS	- Foetus Narcosis
Human health: 					
Environment: Not classified					

Full text of hazard statements mentioned is indicated in section 16.

2.2 LABEL ELEMENTS:

 # This product is labelled with the signal word DANGER in accordance with Regulation (EU) No. 1272/2008~2018/1480 (CLP)

Hazard statements:

H226	Flammable liquid and vapour.
H360D	May damage the unborn child.
H336	May cause drowsiness or dizziness.

Precautionary statements:

P102	Keep out of reach of children.
P201-P202-P405	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Store locked up.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P370+P378	In case of fire: Use water spray, alcohol-resistant foam, dry chemical powder, carbon dioxide to extinguish.
P280F	Wear protective gloves, clothing and eye protection. In case of inadequate ventilation wear respiratory protection.
P308+P313	IF exposed or concerned: Get medical attention.
P501a	Dispose of contents/container in accordance with local regulations.

Supplementary statements:

EUC028	Restricted to professional users.

Substances that contribute to classification:
2-methoxy-1-methylethyl acetate
2-methoxypropyl acetate

2.3 OTHER HAZARDS:
Hazards which do not result in classification but which may contribute to the overall hazards of the substance:
Other physicochemical hazards: *# Vapours may form with air a mixture potentially flammable or explosive.*
Other adverse human health effects: *# Prolonged contact may cause skin dryness.*
Other negative environmental effects: *# Do not fulfil the PBT/vPvB criteria.*

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCES :
 # This product is a mono constituent substance.
Chemical description:
2-methoxy-1-methylethyl acetate.

INGREDIENTS:

50 < 100 %	2-methoxy-1-methylethyl acetate CAS: 108-65-6 , EC: 203-603-9 CLP: Warning: Flam. Liq. 3:H226 | STOT SE (narcosis) 3:H336	REACH: 01-2119475791-29	Index No. 607-195-00-7 < REACH
< 0,5 % 	2-methoxypropyl acetate CAS: 70657-70-4 , EC: 274-724-2 CLP: Danger: Flam. Liq. 3:H226 | Repr. 1B:H360D | STOT SE (irrit.) 3:H335		Index No. 607-251-00-0 < CLP00

Impurities:
 # Does not contain other components or impurities which will influence the classification of the product.

Stabilizers:
None

Reference to other sections:
For more information on hazardous ingredients, see sections 8, 11, 12 and 16.

SUBSTANCES OF VERY HIGH CONCERN (SVHC):
 # List updated by ECHA on 15/01/2019.
Substances SVHC subject to authorisation, included in Annex XIV of Regulation (EC) no. 1907/2006:
None
Substances SVHC candidate to be included in Annex XIV of Regulation (EC) no. 1907/2006:
None

PERSISTENT, BIOACCUMULABLE AND TOXIC PBT, OR VERY PERSISTENT AND VERY BIOACCUMULABLE VPVB SUBSTANCES:
Do not fulfil the PBT/vPvB criteria.

3.2 MIXTURES:
Not applicable (substance).

SECTION 4 : FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST-AID MEASURES:

 # When in doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Lifeguards should pay attention to self-protection and use the recommended protective equipment if there is a possibility of exposure.

Route of exposure	Symptoms and effects, acute and delayed	Description of first-aid measures
Inhalation: 	*# The vapours may be irritant and cause dizziness, headache, nausea, vomiting and narcosis.*	*# Remove the patient out of the contaminated area into the fresh air. Consult a doctor in case of respiratory symptoms.*
Skin:	*# Prolonged contact may cause skin dryness.*	*# Remove immediately contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and neutral soap, or use a suitable skin cleanser.*
Eyes:	*# Contact with the eyes produces redness and pain.*	*# Rinse eyes copiously by irrigation with plenty of clean, fresh water for at least 10 minutes, holding the eyelids apart, until the irritation is reduced. Remove contact lenses after the first 1-2 minutes and continue washing for a few minutes. If irritation persists, consult a physician.*
Ingestion:	*# If swallowed, may cause irritation of the throat, abdominal pain, drowsiness, nausea, vomiting and diarrhoea.*	*# If swallowed, seek immediate medical attention. Do not induce vomiting, unless directed to do so by medical personnel. Should vomiting occur spontaneously, keep free respiratory tract. Keep the patient at rest.*

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
The main symptoms and effects are indicated in sections 4.1 and 11.1

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:
Notes to physician: *# Treatment should be directed at the control of symptoms and the clinical condition of the patient. Periodic medical check-ups are recommended, depending on the degree of exposure.*
Antidotes and contraindications: *# There is no specific antidote.*

SECTION 5 : FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:
 # Burning liquids may be extinguished by dilution with water. Extinguishing powder or CO2. In the case of more important fires, also alcohol resistant foam and water spray/mist. The use of alcohol resistant foams (ATC-type) are preferred. You can also use the general purpose synthetic foams (including AFFF) or common protein foams, but they will be less effective. Do not use for extinguishing: direct water jet. Direct water jet may not be effective to extinguish the fire, since the fire may spread.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:
 # The pressure may increase and the container may explode if heated in case of fire. The vapour is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas, or travel a considerable distance to a source of ignition and flash back. Liquid waste seeping into the sewer may create a risk or fire or explosion. As consequence of combustion or thermal decomposition, hazardous products may be produced: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products may be a hazard to health. Carbon monoxide is very toxic by inhalation. Carbon dioxide, in sufficient concentrations, may behave as a suffocating gas.

5.3 ADVICE FOR FIREFIGHTERS:
Special protective equipment: *# Depending on magnitude of fire, heat-proof protective clothing may be required, appropriate independent breathing apparatus, gloves, protective glasses or face masks and boots. If the fire-proof protective equipment is not available or is not being used, combat fire from a sheltered position or from a safe distance. The standard EN469 provides a basic level of protection for chemical incidents.*
Other recommendations: *# Keep people away. Isotate fire and prevent unnecessary access. Combat fire from a sheltered position or from a safe distance. Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Keep out of low areas where gases and/or fumes may accumulate. Do not allow fire-fighting residue to enter drains, sewers or water courses.*

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
 # Eliminate possible sources of ignition and when appropriate, ventilate the area. Do not smoke. Avoid direct contact with this product. Avoid breathing vapours. Keep people without protection in opposition to the wind direction.

6.2 ENVIRONMENTAL PRECAUTIONS:
 # Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sewages, inform the appropriate authorities in accordance with local regulations.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:
 # Contain and mop up spills with non-combustible absorbent materials (earth, sand, vermiculite, diatomaceous earth, etc..). Keep the remains in a closed container.

6.4 REFERENCE TO OTHER SECTIONS:
For contact information in case of emergency, see section 1.
For information on safe handling, see section 7.
For exposure controls and personal protection measures, see section 8.
For waste disposal, follow the recommendations in section 13.

SECTION 7 : HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:
 # Comply with the existing legislation on health and safety at work.
General recommendations:
 # Avoid any type of leakage or escape. Keep the container tightly closed.
Recommendations for the prevention of fire and explosion risks:
 # Vapours are heavier than air, may spread along floors to a considerable distance, can form explosive mixtures with air and are able to reach distant ignition sources and flame up or explode. Due to its flammability, this material should only be used in areas from which all naked lights and other sources of ignition have been excluded and away from other heat or electrical sources. Switch mobile phones off and do not smoke. No tools with a potential for sparks should be used.

- Flash point	:	#	45.	# ºC	Abel
- Autoignition temperature	:	#	315.	# ºC	
- Upper/lower flammability or explosive limits	:	#	1.5 - 7.0	% Volume 25ºC	
- Ventilation requirement	:	#	112.	m3/l	Air/Preparation

to keep below 1/10 of the Lower Explosive Limit.
Recommendations for the prevention of toxicological risks:
 # Pregnant women should not be employed in any process in which this product is used. Do not eat, drink or smoke while handling. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8.
Recommendations for the prevention of environmental contamination:
 # It is not considered a danger to the environment. In the case of accidental spillage, follow the instructions indicated in section 6.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:
 # Forbid the entry to unauthorized persons. Keep away from food, drink and animal foodstuffs. Keep out of reach of children. This product should be stored isolated from heat and electrical sources. Do not smoke in storage area. If possible, avoid direct contact with sunlight. Avoid extreme humidity conditions. In order to avoid leakages, the containers, after use, should be closed carefully and placed in a vertical position. For more information, see section 10.

Class of storage	:	*# According to current legislation.*
Temperature interval	:	*# min: 5. ºC, max: 35. ºC (recommended).*

Incompatible materials:
 # Keep away from oxidizing agents, acids.
Type of packaging:
 # According to current legislation. Containers made of steel or stainless steel, or coated with phenonic resin Avoid galvanized steel. Avoid copper and its alloys (brass, bronze, etc..). Avoid aluminium and its alloys. Avoid light alloys.
Limit quantity (Seveso III): *# Directive 2012/18/EU:*
- Named dangerous substances/mixtures: None
- Hazard categories and lower-/upperthreshold quantities in tonnes (t):
· Physical hazards: Flammable liquid and vapour (P5c) (5000t/50000t).
· Health hazards: Not applicable
· Environmental hazards: Not applicable
· Other hazards: Not applicable.
- Threshold quantity for the application of lower-tier requirements: 5000 tons
- Threshold quantity for the application of upper-tier requirements: 50000 tons
- Remarks:
The qualifying quantities set out above relate to each establishment. The quantities to be considered for the application of the relevant Articles are the maximum quantities which are present or are likely to be present at any one time. Dangerous substances present at an establishment only in quantities equal to or less than 2 % of the relevant qualifying quantity shall be ignored for the purposes of calculating the total quantity present, if their location within an establishment is such that it cannot act as an initiator of a major accident elsewhere at that establishment. For more details, see note 4 of Annex I of the Seveso Directive.

7.3 SPECIFIC END USES:
 # For the use of this product do not exist particular recommendations apart from that already indicated. See the material technical data sheet.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1

CONTROL PARAMETERS:

 # If a product contains ingredients with exposure limits, may be necessary a personnel monitoring, work place or biological, to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to EN689, EN14042 and EN482 standard concerning methods for assesing the exposure by inhalation to chemical agents, and exposure to chemical and biological agents. Reference should be also made to national guidance documents for methods for the determination of dangerous substances.

OCCUPATIONAL EXPOSURE LIMIT VALUES (TLV)

AGCIH 2018	Year	TLV-TWA ppm	TLV-TWA mg/m3	TLV-STEL ppm	TLV-STEL mg/m3	Remarks
2-methoxy-1-methylethyl acetate		50.	275.	100.	550.	Recommended Skin
2-methoxypropyl acetate		20.	110.	40.	220.	Recommended

TLV - Threshold Limit Value, TWA - Time Weighted Average, STEL - Short Term Exposure Limit.
Skin - Danger of cutaneous absorption.

Dermal (Vd): *# Means that, in exposures to this substance, the contribution by the cutaneous route, including the mucous membranes and eyes, may result significant for the overall body content if no measures are taken to prevent absorption. There are some chemicals for which dermal absorption, both in liquid and vapour phases, can be very high, and this route of entry may be or equal or greater importance even that inhalation pathway. In these situations, the use of a biological control is essential in order to quantify the overall amount of contaminant absorbed.*

BIOLOGICAL LIMIT VALUES:
Not available

DERIVED NO-EFFECT LEVEL (DNEL):
Derived no-effect level (DNEL) is a level of exposure that is considered safe, derived from toxicity data according to specific guidances included in REACH. DNEL values may differ from a occupational exposure limit (OEL) for the same chemical. OEL values may come recommended by a particular company, a government regulatory agency or an organization of experts. Although considered protective of health, the OEL values are derived by a process different of REACH.

	DNEL Inhalation mg/m3	DNEL Cutaneous mg/kg bw/d	DNEL Oral mg/kg bw/d
Derived no-effect level, workers: - Systemic effects, acute and chronic: 2-methoxy-1-methylethyl acetate	- (a) 275. (c)	- (a) 154. (c)	- (a) - (c)
Derived no-effect level, workers: - Local effects, acute and chronic: 2-methoxy-1-methylethyl acetate	- (a) - (c)	- (a) - (c)	DNEL Eyes mg/cm2 - (a) - (c)
Derived no-effect level, general population: - Systemic effects, acute and chronic: 2-methoxy-1-methylethyl acetate	- (a) 33.0 (c)	- (a) 54.8 (c)	- (a) 1.67 (c)
Derived no-effect level, general population: - Local effects, acute and chronic: 2-methoxy-1-methylethyl acetate	- (a) - (c)	- (a) - (c)	DNEL Eyes mg/cm2 - (a) - (c)

(a) - Acute, short-term exposure, (c) - Chronic, long-term or repeated exposure.
(-) - DNEL not available (without data of registration REACH).

PREDICTED NO-EFFECT CONCENTRATION (PNEC):

	PNEC Fresh water mg/l	PNEC Marine mg/l	PNEC Intermittent mg/l
Predicted no-effect concentration, aquatic organisms: - Fresh water, marine water and intermittent release: 2-methoxy-1-methylethyl acetate	0.635	0.0635	6.35
- Wastewater treatment plants (STP) and sediments in fresh- and marine water: 2-methoxy-1-methylethyl acetate	PNEC STP mg/l 100.	PNEC Sediments mg/kg dw/d 3.29	PNEC Sediments mg/kg dw/d 0.329
Predicted no-effect concentration, terrestrial organisms: - Air, soil and effects for predators and humans: 2-methoxy-1-methylethyl acetate	PNEC Air mg/m3 -	PNEC Soil mg/kg dw/d 0.290	PNEC Oral mg/kg dw/d -

(-) - PNEC not available (without data of registration REACH).

8.2 EXPOSURE CONTROLS:

ENGINEERING MEASURES:

 # Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these measures are not sufficient to maintain concentrations of vapours below the Occupational Exposure Limits, suitable respiratory protection must be worn.

Protection of respiratory system: *# Avoid the inhalation of solvents.*
Protection of eyes and face: *# It is recommended to install water taps, sources or eyewash bottles with clean water close to the working area.*
Protection of hands and skin: *# It is recommended to install water taps or sources with clean water close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred.*

OCCUPATIONAL EXPOSURE CONTROLS: Regulation (EU) No. 2016/425:
As a general measure on prevention and safety in the work place, we recommend the use of a basic personal protection equipment (PPE), with the corresponding marking. For more information on personal protective equipment (storage, use, cleaning, maintenance, type and characteristics of the PPE, protection class, marking, category, CEN norm, etc..), you should consult the informative brochures provided by the manufacturers of PPE.

Mask:  ✓	*# Suitable respiratory protection at low concentrations or short-term incidence: A-type filter mask (brown) for gases and vapours of organic compounds with a boiling point higher than 65ºC (EN14387). Class 1: low capacity up to 1000 ppm, Class 2: medium capacity up to 5000 ppm, Class 3: high capacity up to 10000 ppm. In order to obtain a suitable protection level, the filter class must be selected depending on the type and concentration of the contaminating agents present, in accordance with the specifications supplied by the filter producers. The gas and vapour filters should be changed when you detect the taste or smell of the contaminant.The respiratory equipment with filters does not work satisfactorily when the air contains high concentrations of vapour or oxygen content less than 18% in volume. In presence of high concentrations of vapour, use independent breathing apparatus.*
Safety goggles:  ✓	*# Safety goggles designed to protect against liquid splashes, with suitable lateral protection (EN166). Clean daily and disinfect at regular intervals in accordance with the instructions of the manufacturer.*
Face shield:	*# No.*
Gloves:  ✓	*# Neoprene rubber gloves, thick >0.5 mm (EN374). Nitrile rubber gloves, thick >0.4 mm (EN374). Butyl rubber gloves, thick >0.7 mm (EN374). When repeated or prolonged contact with the product is expected, gloves of protection level 5 or higher should be used, with a breakthrough time of >240 min.When short contact with the product is expected, use gloves with a protection level 2 or higher should be used, with a breakthrough time >30 min.The breakthrough time of the selected glove material should be in accordance with the pretended period of use. There are several factors (for example, temperature), they do in practice the period of use of a protective gloves resistant against chemicals is clearly lower than the established standard EN374. For the selection of a specific type of gloves for specific applications, with certain duration, it should take into account relevant factors to the workplace (without limitation to them), such as: other chemicals which may be handled, physical requirements (protection against cutting/puncture, dextery, thermal protection), potential allergy to he material with which the gloves are made, etc.. Due to the wide variety of circumstances and possibilities, the instructions/specifications provided by the glove supplier should be taken into account.The gloves should be immediately replaced when any sign of degradation is noted.*
Boots:	*# No.*
Apron:  ✓	*# Chemicals-resistant apron.*
Clothing:	*# Advisable.*

Thermal hazards:
 # Not applicable (the product is handled at room temperature).

ENVIRONMENTAL EXPOSURE CONTROLS:
 # Avoid any spillage in the environment. Avoid any release into the atmosphere.

Spills on the soil: *# Prevent contamination of soil.*

Spills in water: *# Do not allow to escape into drains, sewers or water courses.*
- Water Management Act: *# This product does not contain any substance included in the list of priority substances in the field of water policy under Directive 2000/60/EC~2013/39/EU.*

Emissions to the atmosphere: *# Because of volatility, emissions to the atmosphere while handling and use may result, in special when it is used as a solvent. Avoid any solvent release into the atmosphere.*
- VOC (industrial installations): *# If this product is used in an industrial installation, it must be verified if it is applicable the Directive 2010/75/EC, on the limitation of emissions of volatile compounds due to the use of organic solvents in certain activities and installations: Solvents : 100.0% Weight , VOC (supply) : 100.0% Weight , VOC : 54.5% C (expressed as carbon) , Molecular weight (average) : 132.2 , Number C atoms (average) : 6.0 , VOC CMR Cat.1+2 : 0.30%.*

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Appearance

- Physical state	:	#	*Liquid.*		
- Colour	:	#	*Colourless.*		
- Odour	:	#	*Characteristic.*		
- Odour threshold	:	#	*Not available*		
pH-value					
- pH	:	#	*Not applicable (neutral organic substance).*		
Change of state					
- Melting point	:	#	*-65.*	# ºC	
- Initial boiling point	:	#	*145.8*	# ºC *at 760 mmHg*	
Density					
- Vapour density	:	#	*4.56*	at 20ºC 1 atm.	Relative air
- Relative density	:	#	*0.967*	# *at 20/4ºC*	Relative water
- Apparent density	:	#	*0.965*	g/cc at 20ºC	
Stability					
- Decomposition temperature	:	#	*Not available (lack of data).*		
Viscosity:					
- Dynamic viscosity	:	#	*1.1*	cps 20ºC	
- Kinematic viscosity	:	#	*0.40*	mm2/s at 40ºC	
Volatility:					
- Evaporation rate	:	#	*48.3*	nBuAc=100 25ºC	Relative
- Vapour pressure	:	#	*0.42*	# *kPa at 20ºC*	
- Vapour pressure	:	#	*2.5*	kPa at 50ºC	
Solubility(ies)					
- Solubility in water	:	#	*198.*	# *g/l at 20ºC*	
- Liposolubility	:	#	*Not available (lack of data).*		
- Partition coefficient: n-octanol/water	:	#	*0.56*	(as log Pow)	
Flammability:					
- Flash point	:	#	*45.*	ºC	
- Upper/lower flammability or explosive limits	:	#	*1.5 - 7.0*	% Volume 25ºC	
- Autoignition temperature	:	#	*315.*	# ºC	

Explosive properties:
 # In the molecule there is no chemical groups associated with explosive properties.
Oxidizing properties:
 # Not classified as oxidizing product.

9.2 OTHER INFORMATION:

- Surface tension	:		29.4	din/cm at 20ºC
- Heat of combustion	:	#	*5712*	Kcal/kg
- VOC (supply)	:	#	*100.0*	% Weight

The values indicated do not always coincide with product specifications. The data for the product specifications can be found in the corresponding technical data sheet. For additional information concerning physical and chemical properties related to safety and environment, see sections 7 and 12.

SECTION 10 : STABILITY AND REACTIVITY

10.1 REACTIVITY:
 # Product of scarce chemical reactivity.
Corrosivity to metals: *# It is not corrosive to metals.*
Pyrophorical properties: *# It is not pyrophoric.*

10.2 CHEMICAL STABILITY:
 # Stable under recommended storage and handling conditions. Does not polymerize.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:
 # Possible dangerous reaction with oxidizing agents, acids.

10.4 CONDITIONS TO AVOID:
Heat: *# Keep away from sources of heat.*
Light: *# If possible, avoid direct contact with sunlight.*
Air: *# The product is not affected by exposure to air, but should not be left the containers open.*
Humidity: *# Avoid extreme humidity conditions.*
Pressure: *# Not relevant.*
Shock: *# The product is not sensitive to shocks, but as a recommendation of a general nature should be avoided bumps and rough handling to avoid dents and breakage of packaging, especially when the product is handled in large quantities, and during loading and download operations.*

10.5 INCOMPATIBLE MATERIALS:
 # Keep away from oxidizing agents, acids.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:
 # As consequence of thermal decomposition, hazardous products may be produced: carbon monoxide.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

ACUTE TOXICITY:

Dose and lethal concentrations :	LD50 (OECD 401)	LD50 (OECD 402)	LC50 (OECD 403)
	mg/kg bw oral	mg/kg bw cutaneous	mg/m3-4h inhalation
2-methoxy-1-methylethyl acetate	8532. Rat	> 5000. Rat	> 35700. Rat

Estimates of acute toxicity (ATE) :
Not classified as a product with acute toxicity.

No observed adverse effect level
Not available
Lowest observed adverse effect level
Not available

INFORMATION ON LIKELY ROUTES OF EXPOSURE: Acute toxicity:

Routes of exposure	Acute toxicity	Cat.	Main effects, acute and/or delayed	Criteria
Inhalation: Not classified	ATE > 20000 mg/m3	-	# *Not classified as a product with acute toxicity if inhaled (based on available data, the classification criteria are not met).*	GHS/CLP 3.1.2. OECD 403
Skin: **Not classified**	ATE > 2000 mg/kg bw	-	# *Not classified as a product with acute toxicity in contact with skin (based on available data, the classification criteria are not met).*	GHS/CLP 3.1.2. OECD 402
Eyes: **Not classified**	Not available	-	# *Not classified as a product with acute toxicity by eye contact (lack of data).*	GHS/CLP 1.2.5.
Ingestion: **Not classified**	ATE > 2000 mg/kg bw	-	# *Not classified as a product with acute toxicity if swallowed (based on available data, the classification criteria are not met).*	GHS/CLP 3.1.2. OECD 401

CORROSION / IRRITATION / SENSITISATION:

Danger class	Target organs	Cat.	Main effects, acute and/or delayed	Criteria
Respiratory corrosion/irritation: Not classified	-	-	# *Not classified as a product corrosive or irritant by inhalation (based on available data, the classification criteria are not met).*	GHS/CLP 1.2.6. 3.8.2.2.1.
Skin corrosion/irritation: Not classified	-	-	# *Not classified as a product corrosive or irritant in contact with skin (based on available data, the classification criteria are not met).*	GHS/CLP 3.2.2. OECD 404
Serious eye damage/irritation: Not classified	-	-	# *Not classified as a product corrosive or irritant in contact with eyes (based on available data, the classification criteria are not met).*	GHS/CLP 3.3.2. OECD 405
Respiratory sensitisation: Not classified	-	-	# *Not classified as a product sensitising by inhalation (based on available data, the classification criteria are not met).*	GHS/CLP 3.4.2.1.
Skin sensitisation: Not classified	-	-	# *Not classified as a product sensitising by skin contact (based on available data, the classification criteria are not met).*	GHS/CLP 3.4.2.2. OECD 406

ASPIRATION HAZARD:

Danger class	Target organs	Cat.	Main effects, acute and/or delayed	Criteria
Aspiration hazard: **Not classified**	-	-	# *Not classified as a product hazardous by aspiration (based on available data, the classification criteria are not met).*	GHS/CLP 3.10.2.

SPECIFIC TARGET ORGANS TOXICITY (STOT): Single exposure (SE) and/or Repeated exposure (RE):

Effects	SE/RE	Target organs	Cat.	Main effects, acute and/or delayed	Criteria
Neurological:	SE	CNS	Cat.3	# *NARCOSIS: May cause drowsiness or dizziness if inhaled.*	GHS/CLP 3.8.2.2.2.

ADDITIONAL INFORMATION:
Not available.

CMR EFFECTS:
Carcinogenic effects: *# It is not considered as a carcinogenic product.*
Genotoxicity: *# It is not considered as a mutagenic product. Ames test: negative.*
Toxicity for reproduction: *# Not classified as a product that may damage fertility. Does not harm the unborn child.*
Ingredients which can be toxic for human reproduction:
2-methoxypropyl acetate (cat.1B)
Effects via lactation: *# Not classified as a hazardous product for children breast-fed.*

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:
Routes of exposure: *# May be absorbed by inhalation, through the skin and by ingestion.*
Short-term exposure: *# Exposure to solvent vapour concentrations in excess of the stated occupational exposure limit, may result in adverse health effects, such as mucous membrane and respiratory system irritation and adverse effects on kidneys, liver and central nervous system. Liquid splashes in the eyes may cause irritation and reversible damage. If swallowed, may cause irritation of the throat; other effects may be the same as described in the exposure to vapours.*
Long-term or repeated exposure: *# Repeated or prolonged contact may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. May have an adverse effect on the liver and on the kidneys.*

INTERACTIVE EFFECTS:
 # Not available.

INFORMATION ABOUT TOXICOCINETICS, METABOLISM AND DISTRIBUTION:
Dermal absorption:
Substances for which dermal absorption can be very high: 2-methoxy-1-methylethyl acetate.
Basic toxicokinetics: *# Not available.*

ADDITIONAL INFORMATION:
Not available.

SECTION 12 : ECOLOGICAL INFORMATION

12.1 TOXICITY:

Acute toxicity in aquatic environment :	LC50 (OECD 203) mg/l·96hours	EC50 (OECD 202) mg/l·48hours	EC50 (OECD 201) mg/l·72hours
2-methoxy-1-methylethyl acetate	134. Fishes	408. Daphnia	> 1000. Algae

No observed effect concentration
Not available
Lowest observed effect concentration
Not available

ASSESSMENT OF AQUATIC TOXICITY:

Aquatic toxicity	Cat.	Main hazards to the aquatic environment	Criteria
Acute aquatic toxicity: Not classified	-	*# Not classified as a hazardous product with acute toxicity to aquatic life (based on available data, the classification criteria are not met).*	GHS/CLP 4.1.2.
Chronic aquatic toxicity: Not classified	-	*# Not classified as a dangerous product with chronic toxicity to aquatic life with long lasting effects (based on available data, the classification criteria are not met).*	GHS/CLP 4.1.2.

12.2 PERSISTENCE AND DEGRADABILITY:
Biodegradability:
 # Readily biodegradable.

Aerobic biodegradation	DQO mgO2/g	%DBO/DQO 5 days 14 days 28 days	Biodegradability
2-methoxy-1-methylethyl acetate	1520.	~ 22. ~ 78. ~ 90.	Easy
2-methoxypropyl acetate	1816.	> 70.	Easy

 # Note: Biodegradability data correspond to an average of data from various bibliographic sources.
Hydrolysis: *# Not available.*
Photodegradability: *# Because of indirect photochemical reactions, it is oxided in the atmosphere mainly in contact with hydroxyl radicals, under the influence of sunlight. Degradation in the atmospheric environment is expected within hours.*

12.3 BIOACCUMULATIVE POTENTIAL:
 # This product is deemed to have a low bioaccumulation potential.

Bioaccumulation	log Pow	BCF L/kg	Potential
2-methoxy-1-methylethyl acetate	0.560	3.2 (calculated)	Not available
2-methoxypropyl acetate	0.360	3.2 (calculated)	Not available

12.4 MOBILITY IN SOIL:
 # Very high potential mobility in soil (Poc from 0 to 50).

Mobility	log Koc	Constant of Henry Pa·m3/mol 20ºC	Potential
2-methoxy-1-methylethyl acetate	0.230	0.42 (calculated)	Not available
2-methoxypropyl acetate	1.06		Not available

12.5 RESULTS OF PBT AND VPVB ASSESMENT: Annex XIII of Regulation (EC) no. 1907/2006:
 # Do not fulfil the PBT/vPvB criteria : Half-life in the marine environment < 60 days, Half-life in fresh-water or estuarine < 40 days, Half-life in marine sediments < 180 days, Half-life in sediments of fresh-water or estuarine < 120 days, Half-life in the soil < 120 days, Bioconcentration factor BCF < 2000, Long term ´No observed effect concentration´ for fresh-water or marine organisms NOEC > 0.01 mg/l, It is NOT classified as CMR, It has NO endocrine disrupting potential.

12.6 OTHER ADVERSE EFFECTS:
Ozone depletion potential: *# Not dangerous for the ozone layer. Substance not listed in Annex I to Regulation (EC) 2037/2000~1005/2009 on substances that deplete the ozone layer.*
Photochemical ozone creation potential: *# It contributes relatively little to the formation of ozone in the troposphere.*
Earth global warming potential: *# In case of fire or incineration liberates CO2.*
Endocrine disrupting potential: *# No.*

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: *# Directive 2008/98/EC~Regulation (EU) no. 1357/2014:*
 # Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. This material and its container must be disposed in a safe way. Do not discharge into drains or the environment, dispose at an authorised waste collection point. Waste should be handled and disposed in accordance with current local and national regulations. For exposure controls and personal protection measures, see section 8.

Disposal of empty containers: *# Directive 94/62/EC~2015/720/EU, Decision 2000/532/EC~2014/955/EU:*
 # Emptied containers and packaging should be disposed in accordance with currently local and national regulations. The classification of packaging as hazardous waste will depend on the degree of empting of the same, being the holder of the residue responsible for their classification, in accordance with Chapter 15 01 of Decision 2000/532/EC, and forwarding to the appropriate final destination. With contaminated containers and packaging, adopt the same measures as for the product in itself.

Procedures for neutralising or destroying the product:
 # Controlled incineration in special facilities for chemical waste, in accordance with local regulations.

SECTION 14 : TRANSPORT INFORMATION

14.1 UN NUMBER: 1263

14.2 UN PROPER SHIPPING NAME:
PAINT RELATED MATERIAL

14.3 TRANSPORT HAZARD CLASS(ES):

Transport by road (ADR 2019) and
Transport by rail (RID 2019):

- Class: 3
- Packing group: III
- Classification code: F1
- Tunnel restriction code: (D/E)
- Transport category: 3 , max. ADR 1.1.3.6. 1000 L
- Limited quantities: 5 L (see total exemptions ADR 3.4)
- Transport document: Consignment paper.
- Instructions in writing: ADR 5.4.3.4

Transport by sea (IMDG 38-16):

- Class: 3
- Packing group: III
- Emergency Sheet (EmS): F-E,S_E
- First Aid Guide (MFAG): 310,313
- Marine pollutant: No.
- Transport document: Shipping Bill of lading.

Transport by air (ICAO/IATA 2018):

- Class: 3
- Packing group: III
- Transport document: Air Bill of lading.

Transport by inland waterways (ADN):
 # Not available.

14.4 PACKING GROUP:
See section 14.3

14.5 ENVIRONMENTAL HAZARDS:
 # Not applicable (not classified as hazardous for the environment).

14.6 SPECIAL PRECAUTIONS FOR USER:
 # Ensure that persons transporting the product know what to do in case of accident or spill. Always transport in closed containers that are upright and secure. Ensure adequate ventilation.

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE
 # Not applicable.

SECTION 15 : REGULATORY INFORMATION

15.1 EU SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC:
The regulations applicable to this product generally are listed throughout this Safety Data Sheet.

Restrictions on manufacture, placing on market and use: See section 1.2

Tactile warning of danger: Not applicable (the classification criteria are not met).

Child safety protection: Not applicable (the classification criteria are not met).

OTHER REGULATIONS:

Control of the risks inherent in major accidents (Seveso III): See section 7.2

Other local legislations:
 # The receiver should verify the possible existence of local regulations applicable to the chemical.

15.2 CHEMICAL SAFETY ASSESSMENT:
 # A chemical safety assessment has been carried out for this product.

SECTION 16 : OTHER INFORMATION

TEXT OF THE PHRASES AND NOTES REFERENCED IN SECTIONS 2 AND/OR 3:
Hazard statements according the Regulation (EU) No. 1272/2008~2018/1480 (CLP), Annex III:
H226 Flammable liquid and vapour. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness .H360D May damage the unborn child.

 # ADVICES ON ANY TRAINING APPROPRIATE FOR WORKERS:
 # It is recommended for all staff that will handle this product to carry out a basic training in occupational risk and prevention, in order to provide understanding and interpretation of Safety Data Sheets and labelling of products as well.

MAIN LITERATURE REFERENCES AND SOURCES FOR DATA:
 # · European Chemicals Agency: ECHA, http://echa.europa.eu/
 # · Access to European Union Law, http://eur-lex.europa.eu/
· Industrial Solvents Handbook, Ibert Mellan (Noyes Data Co., 1970).
· Threshold Limit Values, (AGCIH, 2017).
· European agreement on the international carriage of dangerous goods by road, (ADR 2019).
· International Maritime Dangerous Goods Code IMDG including Amendment 38-16 (IMO, 2016).

 # ABBREVIATIONS AND ACRONYMS:
List of abbreviations and acronyms that can be used (but not necessarily used) in this Safety Data Sheet:

 # · REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
 # · GHS: Globally Harmonized System of Classification and Labelling of Chemicals of the United Nations.
 # · CLP: European regularion on Classificatin, Labelling amd Packaging of substances and chemical mixtures.
 # · EINECS: European Inventory of Existing Commercial Chemical Substances.
 # · ELINCS: European List of Notified Chemical Substances.
 # · CAS: Chemical Abstracts Service (Division of the American Chemical Society).
 # · UVCB: Substances of Unknown or Variable composition, complex reaction products or biological materials.
 # · SVHC: Substances of Very High Concern.
 # · PBT: Persistent, bioaccumulable and toxic substances.
 # · vPvB: Very persistent and very bioaccumulable substances.
 # · VOC: Volatile Organic Compounds.
 # · DNEL: Derived No-Effect Level (REACH).
 # · PNEC: Predicted No-Effect Concentration (REACH).
 # · LD50: Lethal dose, 50 percent.
 # · LC50: Lethal concentration, 50 percent.
 # · UN: United Nations Organisation.
 # · ADR: European agreement concerning the international carriage of dangeous goods by road.
 # · RID: Regulations concerning the international transport of dangeous goods by rail.
 # · IMDG: International Maritime code for Dangerous Goods.
 # · IATA: International Air Transport Association.
 # · ICAO: International Civil Aviation Organization.

SAFETY DATA SHEET REGULATIONS :
 # Safety Data Sheet in accordance with Article 31 of Regulation (EC) No. 1907/2006 (REACH) and Annex of Regulation (EU) No. 2015/830.

HISTORIC:	Revision:
Version: 3	05/06/2017
Version: 4	17/02/2020

 # Changes since previous Safety Data Sheet:
 # Legislative, contextual, numerical, methodological and normative changes since the previous version of the present Safety Data Sheet are identified by a red-italic hash (#).