ARTIPOX PDCB - 2C - COMP A NEGRO
Code: 12251AARNEGRO

Version: 3 Revision: 01/09/2015 Previous revision: 31/05/2015 Date of printing: 01/09/2015

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

1.1 PRODUCT IDENTIFIER: ARTIPOX PDCB - 2C - COMP A NEGRO
Code: 12251AARNEGRO

1.2 RELEVANT IDENTIFIED USES AND USES ADVISED AGAINST:
Intended uses (main technical functions): [X] Industrial [X] Professional
Two-pack performance coating, solvent-borne.
Uses advised against:
This product is not recommended for any use or sector of use industrial, professional or consume other than those previously listed as 'Intended or identified uses'. For professional use only. If your use is not covered, please contact the supplier of this material safety data sheet.
Restrictions on manufacture, placing on market and use, according to Annex XVII of Regulation (EC) No. 1907/2006:
Contains: Contains substances CMR, categories 1 or 2: Restricted to professional users. Forbidden to the general public. 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:
ARTIC INDUSTRIAL QUÍMICA, S.A.
Ctra. de Gerb, 51-73 - 25600 - BALAGUER (Lleida)
Phone: (+34) 902 431250 - Fax: (+34) 973 445045
E-mail address of the person responsible for the safety data sheet:
e-mail: info@articsa.net

1.4 EMERGENCY TELEPHONE NUMBER: (+34) 973 450717 (9:00-13:00 / 15:00-18:00 h.) (working hours)

SECTION 2 : HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

Classification in accordance with Regulation (EC) No. 1272/2008~487/2013 (CLP):
DANGER: Skin Irrit. 2:H315 | Eye Irrit. 2:H319 | Skin Sens. 1:H317 | Muta. 1B:H340 | Carc. 1A:H350 | Repr. 1B:H360FD | Aquatic Acute 1:H400 | Aquatic Chronic 1:H410

Danger class	Classification of the mixture	Cat.	Routes of exposure	Target organs	Effects
Physicochemical: Not classified	Skin Irrit. 2:H315 Eye Irrit. 2:H319 Skin Sens. 1:H317	Cat.2 Cat.2 Cat.1	Skin Eyes Skin	Skin Eyes Skin	Irritation Irritation Allergy
Human health:	Muta. 1B:H340 Carc. 1A:H350 Repr. 1B:H360FD	Cat.1B Cat.1A Cat.1B	. . .	. . Reproductive system	Genetic defects Cancer Fertility, Fetus
Environment:	Aquatic Acute 1:H400 Aquatic Chronic 1:H410	Cat.1 Cat.1	- -	- -	- -

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 (EC) No. 1272/2008~487/2013 (CLP)

Hazard statements:

H350	May cause cancer.
H340	May cause genetic defects.
H360FD	May damage fertility. May damage the unborn child.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H410	Very toxic to aquatic life with long lasting effects.

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.
P280F	Wear protective gloves, clothing and eye protection. In case of inadequate ventilation wear respiratory protection.
P303+P361+P353-P352-P312	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Call a POISON CENTER or doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical attention.
P273-P391-P501a	Avoid release to the environment. Collect spillage. Dispose of contents/container in a safe way.

Supplementary statements:

EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUC028	Restricted to professional users.

Hazardous ingredients:
Epoxy resin (average molecular weight <700)
Pitch, coal tar, high-temperature
Creosote oil, acenaphthene fraction
Distillates (coal tar), heavy oils

2.3 OTHER HAZARDS:

Hazards which do not result in classification but which may contribute to the overall hazards of the mixture:
Other physicochemical hazards: No other relevant adverse effects are known.
Other adverse human health effects: Prolonged exposure to vapours may produce transient drowsiness. In case of prolonged contact, the skin may become dry.
Other negative environmental effects: Does not contain substances that fulfil the PBT/vPvB criteria.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCES:

Not applicable (mixture).

3.2 MIXTURES:

This product is a mixture.
Chemical description:
Mixture of pigments, resins and additives in organic solvents.

HAZARDOUS INGREDIENTS:
Substances taking part in a percentage higher than the exemption limit:

20 < 25 %	Epoxy resin (average molecular weight <700) CAS: 25068-38-6 , EC: 500-033-5 CLP: Warning: Skin Irrit. 2:H315 | Eye Irrit. 2:H319 | Skin Sens. 1:H317 | Aquatic Chronic 2:H411		Index No. 603-074-00-8 < CLP00
5 < 10 %	Xylene CAS: 1330-20-7 , EC: 215-535-7 CLP: Danger: Flam. Liq. 3:H226 | Acute Tox. (inh.) 4:H332 | Acute Tox. (skin) 4:H312 | Skin Irrit. 2:H315 | Eye Irrit. 2:H319 | STOT SE (irrit.) 3:H335 | Asp. Tox. 1:H304		Autoclassified < REACH
5 < 10 %	Pitch, coal tar, high-temperature CAS: 65996-93-2 , EC: 266-028-2 CLP: Danger: Skin Sens. 1:H317 | Muta. 1B:H340 | Carc. 1A:H350 | Repr. 1B:H360FD | Aquatic Acute 1:H400 | Aquatic Chronic 1:H410		Index No. 648-055-00-5 < ATP05
1 < 3 %	Creosote oil, acenaphthene fraction CAS: 90640-84-9 , EC: 292-605-3 CLP: Danger: Skin Irrit. 2:H315 | Eye Irrit. 2:H319 | Skin Sens. 1:H317 | Muta. 2:H341 | Carc. 1B:H350 | STOT RE 2:H373iR | Asp. Tox. 1:H304 | Aquatic Chronic 2:H411	(Note H) (Note M)	Index No. 648-098-00-X < Autoclasificada
1 < 3 %	2-methoxy-1-methylethyl acetate CAS: 108-65-6 , EC: 203-603-9 REACH: 01-2119475791-29 CLP: Warning: Flam. Liq. 3:H226		Index No. 607-195-00-7 < REACH / ATP01
< 1 %	Solvent naphtha (petroleum), light aromatic CAS: 64742-95-6 , EC: 265-199-0 CLP: Danger: Flam. Liq. 3:H226 | Skin Irrit. 2:H315 | STOT SE (narcosis) 3:H336 | Asp. Tox. 1:H304 | Aquatic Chronic 2:H411	(Note H,P)	Index No. 649-356-00-4 < ATP01
< 1 %	Naphthalene CAS: 91-20-3 , EC: 202-049-5 CLP: Warning: Acute Tox. (oral) 4:H302 | Carc. 2:H351i | Aquatic Acute 1:H400 | Aquatic Chronic 1:H410		Index No. 601-052-00-2 < CLP00
< 0,5 %	Distillates (coal tar), heavy oils CAS: 90640-86-1 , EC: 292-607-4 CLP: Danger: Skin Irrit. 2:H315 | Skin Sens. 1:H317 | Muta. 1B:H340 | Carc. 1B:H350 | Repr. 2:H361fd | Aquatic Chronic 3:H412	(Note H)	Index No. 648-044-00-5 < ATP01
< 0,1 %	Benzo(k)fluoranthene CAS: 207-08-9 , EC: 205-916-6 CLP: Danger: Carc. 1B:H350 | Aquatic Acute 1:H400 | Aquatic Chronic 1:H410		Index No. 601-036-00-5 < CLP00
< 0,1 %	Benz(a)anthracene CAS: 56-55-3 , EC: 200-280-6 CLP: Danger: Carc. 1B:H350 | Aquatic Acute 1:H400 | Aquatic Chronic 1:H410		Index No. 601-033-00-9 < ATP01
< 0,05 %	Benzo(d,e,f)chrysene CAS: 50-32-8 , EC: 200-028-5 CLP: Danger: Skin Sens. 1:H317 | Muta. 1B:H340 | Carc. 1B:H350 | Repr. 1B:H360FD | Aquatic Acute 1:H400 | Aquatic Chronic 1:H410		Index No. 601-032-00-3 < CLP00
< 0,01 %	Dibenz(a,h)anthracene CAS: 53-70-3 , EC: 200-181-8 CLP: Danger: Carc. 1B:H350 | Aquatic Acute 1:H400 | Aquatic Chronic 1:H410		Index No. 601-041-00-2 < ATP01

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 15/06/2015.
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:
Pitch, coal tar, high-temperature , CMR/Carc.Cat.1B (Article 57a), PBT (Article 57d), vPvB (Article 57e), Decision: ED/68/2009.

PERSISTENT, BIOACCUMULABLE AND TOXIC PBT, OR VERY PERSISTENT AND VERY BIOACCUMULABLE VPVB SUBSTANCES:
Does not contain substances that fulfill the PBT/vPvB criteria.

SECTION 4 : FIRST AID MEASURES

4.1
4.2 DESCRIPTION OF FIRST-AID MEASURES AND MAIN SYMPTOMS AND EFFECTS, ACUTE AND DELAYED:

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). 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. Wear protective gloves when administering first aid.

Route of exposure	Symptoms and effects, acute and delayed	Description of first-aid measures
Inhalation:	Inhalation of solvent vapours may produce headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, unconsciousness.	Remove the patient out of the contaminated area into the fresh air. If breathing is irregular or stops, administer artificial respiration. If the person is unconscious, place in appropriate recovery position. Keep the patient warm and at rest until medical attention arrives.
Skin:	Skin contact causes redness. In case of prolonged contact, the skin may become dry.	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. Do not use solvents or thinners. Scrupulous personal hygiene and skin care is recommended. In the case of skin reddening or rashes, contact a doctor immediately. In the case of skin alterations, consult a doctor immediately.
Eyes:	Contact with the eyes produces redness and pain.	Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water for at least 15 minutes, holding the eyelids apart, until the irritation is reduced. Call a physician immediately.
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, due to the risk of aspiration. Keep the patient at rest.

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.
Antidotes and contraindications: Specific antidote not known.

SECTION 5 : FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:
Extinguishing powder or CO_2. In the case of more important fires, also alcohol resistant foam and water spray/mist. 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:
Combustible if heated. Fire can produce a dense black smoke. As consequence of combustion or thermal decomposition, hazardous products may be produced: carbon monoxide, carbon dioxide. Irritant. Exposure to combustion or decomposition products may be a hazard to health.

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 not used, combat fire from a sheltered position or at a safe distance. The standard EN469 provides a basic level of protection for chemical incidents.
Other recommendations: Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. 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:
Avoid direct contact with this product. Avoid breathing vapours. Keep people without protection in opossition 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 absorbent materials (sawdust, earth, sand, vermiculite, diatomaceous earth, etc..). Clean preferably with a biodegradable detergent. Avoid use of solvents. Keep the remains in a closed container.

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:

Not applicable.

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 in application and drying areas. After handling, wash hands with soap and water. Skin contact should be avoided, preferably by use of a closed system. Where this is not possible, protective clothing, gloves and face shield should be used to protect bare skin. For exposure controls and personal protection measures, see section 8.

Recommendations for the prevention of environmental contamination:

Product dangerous to the environment. Avoid any spillage in the environment. Pay special attention to the cleaning water. In the case of accidental spillage, follow the instructions indicated in section 6.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Prevent unauthorized access. Keep out of reach of children. Keep away from sources of heat. 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 store	:	According to current legislation.
Maximum storage period	:	24. months
Temperature interval	:	min: 5. ºC, max: 40. ºC (recommended).

Incompatible materials:

Keep away from oxidixing agents, from strongly alkaline and strongly acid materials.

Type of packaging:

According to current legislation.

Limit quantity (Seveso III): Directive 96/82/EC~2003/105/EC:

Lower threshold: 50 tons , Upper threshold: 200 tons

7.3 SPECIFIC END USES:

For the use of this product do not exist particular recommendations apart from that already indicated.

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 2013	Year	TLV-TWA ppm	TLV-TWA mg/m3	TLV-STEL ppm	TLV-STEL mg/m3	Remarks
Xylene	1996	100.	434.	150.	651.	
Pitch, coal tar, high-temperature	1981	-	0.20	-	-	A1 Volatiles
Creosote oil, acenaphthene fraction	2000	-	5.0	-	10.	Mist
2-methoxy-1-methylethyl acetate		50.	275.	100.	550.	**Vd** Recommended
Solvent naphtha (petroleum), light aromatic		50.	290.	-	-	Internal value
Naphthalene	1996	10.	52.	15.	79.	**A4 , Vd**
Distillates (coal tar), heavy oils	2000	-	5.0	-	10.	Mist

TLV - Threshold Limit Value, TWA - Time Weighted Average, STEL - Short Term Exposure Limit.
Vd - Dermal.
A1 - Confirmed carcinogenic in humans.
A4 - Non classified as carcinogenic in humans.
It is applicable the Directive 90/394/EEC~1999/38/EC, on the protection of the health and safety of workers from the risks related to carcinogenic or mutagenic agents at work.

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 chenicals 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 stablished

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	DNEL Inhalation mg/m3 - (a) - (c)	DNEL Cutaneous mg/cm2 - (a) - (c)	DNEL Eyes mg/cm2 - (a) - (c)

Derived no-effect level, general population:
Not applicable (product for professional or industrial use).

(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):

Predicted no-effect concentration, aquatic organisms: - Fresh water, marine water and intermitent release: 2-methoxy-1-methylethyl acetate	PNEC Fresh water mg/l 0.635	PNEC Marine mg/l 0.0635	PNEC Intermittent mg/l 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 dry weight 3.29	PNEC Sediments mg/kg dry weight 0.329
Predicted no-effect concentration, terrestrial organisms: - Air, soil and effects for predator sand humans: 2-methoxy-1-methylethyl acetate	PNEC Air mg/m3 -	PNEC Soil mg/kg dry weight 0.290	PNEC Oral mg/kg bw/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 particulates and vapours below the Occupational Exposure Limits, suitable respiratory protection must be worn.

Protection of respiratory system: Avoid the inhalation of vapours.
Protection of eyes and face: It is recommended to dispose of water taps, sources or eyewash bottles with clean water close to the working area.
Protection of hands and skin: It is recommended to dispose of 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.

OCUPATIONAL EXPOSURE CONTROLS: Directive 89/686/EEC~96/58/EC:
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 EC 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: ✓	A-type filter mask (brown) for gases and vapours of organic compounds with a boiling point higher than 65ºC (EN14387). Classe 1: low capacity up to 1000 ppm, Classe 2: medium capacity up to 5000 ppm, Classe 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 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.
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: ✓	Gloves resistant against chemicals (EN374). When it can be a repeated or prolonged contact, it is recommended to use gloves with a protection level 5 or higher, with a breakthrough time >240 min. When you only expects a short contact, it is recommended to use gloves with a protection level 2 or higher, 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. Due to the wide variety of circumstances and possibilities, we must have in mind the manual of instructions from manufacturers of gloves. Use the proper technique of removing gloves (without touching glove´s outer surface) to avoid contact of the product with the skin. The gloves should be immediately replaced when any sign of degradation is noted.
Boots:	No.
Apron:	No.
Clothing:	Advisable. Put away work clothes under control and separately from the rest. Do not take contaminated clothing home. Wash contaminated work clothes before wearing them again.

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: Very toxic to aquatic organisms. May cause long-term adverse effects on the aquatic environment. Do not allow to escape into drains, sewers or water courses.
Emissions to the atmosphere: Because of volatility, emissions to the atmosphere while handling and use may result. Avoid any release into the atmosphere.
VOC (product ready for use*): It is applicable the Directive 2004/42/EC, on the limitation of emissions of volatile compounds due to the use of organic solvents: PAINTS AND VARNISHES (defined in the Directive 2004/42/EC, Annex I.1): Emission subcategory j) Two-pack performance coating, solvent-borne. VOC (product ready for use*) (ARTIPOX PDCB - 2C - COMP A NEGRO Cod. 12251AARNEGRO / ARTIPOX PDCB - 2C - COMP B NEGRO Cod. 12251BARNEGRO = 100 / 25 en peso) : 170.3 g/l* (VOC max. 500. g/l* starting from 01.01.2010).
VOC (industrial installations): If this product is used in an industrial installation, it must be verified if it is applicable the Directive 1999/13/EC, on the limitation of emissions of volatile compounds due to the use of organic solvents in certain activities and installations: Solvents : 10.9% Weight , VOC (supply) : 10.9% Weight , VOC : 9.0% C (expressed as carbon) , Molecular weight (average) : 115.8 , Number C atoms (average) : 7.9.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Appearance				
- Physical state	:	Liquid.		
- Colour	:	Black.		
- Odour	:	Characteristic		
- Odour threshold	:	Not available (mixture).		
pH-value				
- pH	:	Not applicable		
Change of state				
- Melting point	:	Not applicable (mixture).		
- Initial boiling point	:	137.2	ºC at 760 mmHg	
Density				
- Relative density	:	1.78	at 20/4ºC	Relative water
Stability				
- Decomposition temperature	:	> 200.	ºC	
Viscosity:				
- Dynamic viscosity	:	2300.	cps 23ºC	
- Kinematic viscosity	:	450.	mm2/s at 40ºC	
- Dynamic viscosity	:	20.	Poise 23ºC	
Volatility:				
- Vapour pressure	:	Not available		
Solubility(ies)				
- Solubility in water:	:	Not miscible		
- Solubility in oils and fats:	:	Not available		
Flammability:				
- Flash point	:	Not applicable		
- Upper/lower flammability or explosive limits	:	1.1 - 7.8	% Volume 25ºC	
- Autoignition temperature	:	Not applicable		

Explosive properties:
Not available.
Oxidizing properties:
Not classified as oxidizing product.

9.2 OTHER INFORMATION:

- Solids	:	88.6	% Weight
- VOC (supply)	:	10.9	% Weight
- VOC (supply)	:	194.5	g/l

The values indicated do not always coincide with product specifications. The data for the product specifications can be found in the technical data sheet of the same. 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:
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.

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

10.4 CONDITIONS TO AVOID:
Heat: Keep away from sources of heat.
Light: If possible, avoid direct contact with sunlight.
Air: Not applicable.
Humidity: Avoid extreme humidity conditions. Moisture absorption may have an effect on curing speed, and on other properties as well.
Pressure: Not applicable.
Shock: Not applicable.

10.5 INCOMPATIBLE MATERIALS:
Keep away from oxidixing agents, from strongly alkaline and strongly acid materials.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:
As consequence of thermal decomposition, hazardous products may be produced: sulfur oxides.

SECTION 11 : TOXICOLOGICAL INFORMATION

No experimental toxicological data on the preparation is available. The toxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EC) No. 1272/2008~487/2013 (CLP).

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

ACUTE TOXICITY:

Dose and lethal concentrations for individual ingredients :	DL50 (OECD 401) mg/kg oral	DL50 (OECD 402) mg/kg cutaneous	CL50 (OECD 403) mg/m3.4h inhalation
Epoxy resin (average molecular weight <700)	11400. Rat	> 2000. Rabbit	
Xylene	4300. Rat	1700. Rabbit	> 22080. Rat
Pitch, coal tar, high-temperature	15000. Rat	> 5000. Rat	
Creosote oil, acenaphthene fraction	> 2000. Rat	> 2000. Rat	> 404. Rat
2-methoxy-1-methylethyl acetate	8532. Rat	> 5000. Rat	> 35700. Rat
Solvent naphtha (petroleum), light aromatic	3900. Rat	3160. Rabbit	
Naphthalene	533. Rat	2500. Rat	> 400. Rat
Distillates (coal tar), heavy oils	4030. Rat	> 2000. Rat	

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
Inhalation: Not classified	ETA > 20000 mg/m3	-	Not classified as a product with acute toxicity if inhaled (based on available data, the classification criteria are not met).
Skin: Not classified	ETA > 2000 mg/kg	-	Not classified as a product with acute toxicity in contact with skin (based on available data, the classification criteria are not met).
Eyes: Not classified	Not available	-	Not classified as a product with acute toxicity by eye contact (lack of data).
Ingestion: Not classified	ETA > 5000 mg/kg	-	Not classified as a product with acute toxicity if swallowed (based on available data, the classification criteria are not met).

CORROSION / IRRITATION / SENSITISATION :

Danger class	Target organs	Cat.	Main effects, acute and/or delayed
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).
Skin corrosion/irritation:	Skin	Cat.2	IRRITANT: Causes skin irritation.
Serious eye damage/irritation:	Eyes	Cat.2	IRRITANT: Causes serious eye irritation.
Respiratory sensitisation: Not classified	-	-	Not classified as a product sensitising by inhalation (based on available data, the classification criteria are not met).
Skin sensitisation:	Skin	Cat.1	SENSITISING: May cause an allergic skin reaction.

ASPIRATION HAZARD:

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

SPECIFIC TARGET ORGANS TOXICITY (STOT) : Single exposure (SE) and/or Repeated exposure (RE):
Not classified as a dangerous product for target organs (based on available data, the classification criteria are not met).

CMR EFFECTS:
Carcinogenic effects:
This preparation contains the following ingredients which can cause cancer: Pitch, coal tar, high-temperature (cat.1A), Creosote oil, acenaphthene fraction (cat.1B), Naphthalene (cat.2), Distillates (coal tar), heavy oils (cat.1B), Benzo(k)fluoranthene (cat.1B), Benz(a)anthracene (cat.1B), Benzo(d,e,f)chrysene (cat.1B), Dibenz(a,h)anthracene (cat.1B).
Risk of cancer by skin contact: prolonged or repeated contact with the skin can lead to the development of warts which can take various forms; a few are potentially cancerous, but can be cured by early treatment.
Genotoxicity:
This preparation contains the following ingredients which can be mutagenic: Pitch, coal tar, high-temperature (cat.1B, Distillates (coal tar), heavy oils (cat.1B, Benzo(d,e,f)chrysene (cat.1B.
Toxicity for reproduction:
This preparation contains the following ingredients which can be toxic for human reproduction: Pitch, coal tar, high-temperature (cat.1B), Distillates (coal tar), heavy oils (cat.2), Benzo(d,e,f)chrysene (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 of vapour, through the skin and by ingestion.
Short-term exposure: May irritate the eyes and skin. Irritating to eyes. This product may be a skin sensitizer. It may also be a skin irritant and repeated contact may increase this effect.
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.

INTERACTIVE EFFECTS:
Not available.

INFORMATION ABOUT TOXICOCINETICS, METABOLISM AND DISTRIBUTION:
Dermal absorption:
This preparation contains the following substances for which dermal absorption can be very high: 2-methoxy-1-methylethyl acetate, Naphthalene.
Basic toxicokinetics: Not available.

ADDITIONAL INFORMATION:
- It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the preparation and exposure to spray mist and vapour should be avoided.
- Skin exposure to products containing coal tars or pitches, combined with exposure to sunlight or UV radiation, may result in redness, swelling and burns. This is a sensitisation reaction (photo-toxic erythema) and can result in the effects reoccurring simply by exposure of the sensitised area to sunlight.

SECTION 12 : ECOLOGICAL INFORMATION

No experimental ecotoxicological data on the preparation as such is available. The ecotoxicological classification for these mixture has been carried out by using the conventional calculation method of the Regulation (EC) No. 1272/2008~487/2013 (CLP).

12.1 TOXICITY:

Acute toxicity in aquatic environment for individual ingredients :	CL50 (OECD 203) mg/l.96hours	CE50 (OECD 202) mg/l.48hours	CE50 (OECD 201) mg/l.72hours
Epoxy resin (average molecular weight <700)	1.5 Fishes	1.7 Daphnia	9.4 Algae
Xylene	14. Fishes	16. Daphnia	
Pitch, coal tar, high-temperature	128. Fishes	> 100. Daphnia	220. Algae
Creosote oil, acenaphthene fraction	79. Fishes	7.2 Daphnia	25. Algae
2-methoxy-1-methylethyl acetate	134. Fishes	408. Daphnia	> 1000. Algae
Solvent naphtha (petroleum), light aromatic	9.2 Fishes	6.1 Daphnia	
Naphthalene	6.1 Fishes	2.1 Daphnia	0.40 Algae
Distillates (coal tar), heavy oils	> 100. Fishes	22. Daphnia	48. Algae
Benzo(k)fluoranthene		0.0014 Daphnia	
Benz(a)anthracene		< 0.01 Daphnia	< 0.001 Algae
Benzo(d,e,f)chrysene		0.0050 Daphnia	0.0050 Algae
Dibenz(a,h)anthracene		0.0018 Daphnia	

No observed effect concentration	NOEC (OECD 210) mg/l.28days	NOEC (OECD 211) mg/l.21days
Epoxy resin (average molecular weight <700)		0.30 Daphnia
2-methoxy-1-methylethyl acetate		> 100. Daphnia

Lowest observed effect concentration
Not available

12.2 PERSISTENCE AND DEGRADABILITY:
Not available.

Aerobic biodegradation for individual ingredients :	DQO mgO2/g	%DBO/DQO 5 days 14 days 28 days	Biodegradability
Epoxy resin (average molecular weight <700)		1.	Not easy
Xylene	2620.		Easy
Pitch, coal tar, high-temperature			Not easy
Creosote oil, acenaphthene fraction			Not easy
2-methoxy-1-methylethyl acetate	1520.	~ 22. ~ 78. ~ 90.	Easy
Solvent naphtha (petroleum), light aromatic	3195.		Easy
Naphthalene	2996.		Easy
Distillates (coal tar), heavy oils			Not easy
Benzo(k)fluoranthene	2917.		Not easy
Benz(a)anthracene	2943.		Not easy
Benzo(d,e,f)chrysene	2917.		Not easy
Dibenz(a,h)anthracene	2931.		Not easy

12.3 BIOACCUMULATIVE POTENTIAL:
Not available.

Bioaccumulation for individual ingredients :	logPow	BCF L/kg	Potential
Epoxy resin (average molecular weight <700)	3.24	31. (calculated)	Low
Xylene	2.95	29. (calculated)	Low
Pitch, coal tar, high-temperature	6.04	2000. (calculated)	High
Creosote oil, acenaphthene fraction	3.80	> 100. (calculated)	Low
2-methoxy-1-methylethyl acetate	0.560	3.2 (calculated)	No bioaccumulable
Solvent naphtha (petroleum), light aromatic	3.30	70. (calculated)	Low
Naphthalene	3.35	70. (calculated)	Low
Distillates (coal tar), heavy oils	5.00		High
Benzo(k)fluoranthene	6.20		High
Benz(a)anthracene	5.76	2934. (calculated)	High
Benzo(d,e,f)chrysene	6.13	5147. (calculated)	High
Dibenz(a,h)anthracene	6.54	9596. (calculated)	High

12.4 MOBILITY IN SOIL:
Not available.

12.5 RESULTS OF PBT AND VPVB ASSESMENT: Annex XIII of Regulation (EC) no. 1907/2006:
Does not contain substances that fulfill the PBT/vPvB criteria.

12.6 OTHER ADVERSE EFFECTS:
Ozone depletion potential: Not available.
Photochemical ozone creation potential: Not available.
Earth global warming potential: In case of fire or incineration liberates CO2.
Endocrine disrupting potential: Not available.

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: Directive 2008/98/EC:
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 of in a safe way. Do not discharge into drains or the environment, dispose of at an authorised waste collection point. Waste should be handled and disposed of 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~2005/20/EC, Decision 2000/532/EC:
Emptied containers and packaging should be disposed of 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, but in accordance with local regulations.

SECTION 14 : TRANSPORT INFORMATION

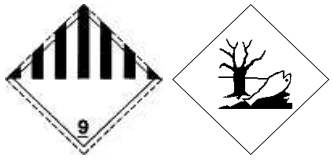
14.1 UN NUMBER: 3082

14.2 UN PROPER SHIPPING NAME:
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains epoxy resin (average molecular weight <700), in mixture)

14.3
14.4 TRANSPORT HAZARD CLASS(ES) AND PACKING GROUP:

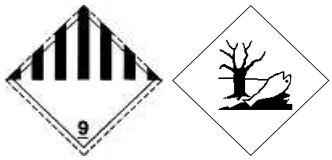
Transport by road (ADR 2015) and
Transport by rail (RID 2015):

- Class: 9
- Packaging group: III
- Classification code: M6
- Tunnel restriction code: (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 36-12):

- Class: 9
- Packaging group: III
- Emergency Sheet (EmS): F-A,S-F
- First Aid Guide (MFAG): -
- Marine pollutant: Yes.
- Transport document: Shipping Bill of lading.



Transport by air (ICAO/IATA 2014):

- Class: 9
- Packaging group: III
- Transport document: Air Bill of lading.

Transport by inland waterways (ADN):
Not available.

14.5 ENVIRONMENTAL HAZARDS:
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 in a vertical position and sure. 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 material safety data sheet.

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

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

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

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

VOC information on the label:
Contains VOC max. 171. g/l - The limit value 2004/42/CE-IIA cat.j) for the product ready for use is VOC max. 500 .g/l (2010).

OTHER REGULATIONS:
Not available

15.2 CHEMICAL SAFETY ASSESSMENT:
For this mixture has not been carried out a chemical safety assessment.

SECTION 16 : OTHER INFORMATION

16.1

TEXT OF THE PHRASES AND NOTES REFERENCED IN SECTIONS 2 AND/OR 3:
Hazard statements according the Regulation (EC) No. 1272/2008~487/2013 (CLP), Annex III:
H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. H340 May cause genetic defects. H341 Suspected of causing genetic defects. H350 May cause cancer. H360FD May damage fertility. May damage the unborn child. H361fd Suspected of damage fertility. Suspected of damage the unborn child. H351i Suspected of causing cancer if inhaled. H373iR May cause damage to respiratory system through prolonged or repeated exposure if inhaled.
Notes related to the identification, classification and labelling of the substances:
Note H : The classification and label shown for this substance applies to the dangerous property(ies) indicated by the risk phrase(s) in combination with the category(ies) of danger shown.
Note M : It is unnecessary to apply the classification as carcinogenic if it can be prooved that the substance contains less than 0.005% benzo[a]-pirene (EC No. 200-028-5) in weight.
Note P : The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1% w/w benzene (EC No. 200-753-7).

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 material 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, 2013).
· European agreement on the international carriage of dangerous goods by road, (ADR 2015).
· International Maritime Dangerous Goods Code IMDG including Amendment 36-12 (IMO, 2012).

ABBREVIATIONS AND ACRONYMS :
List of abbreviations and acronyms that can be used (but not necessarily used) in this material safety data sheet:

· REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
· DSD: Dangerous Substances Directive.
· DPD: Dangerous Preparations Directive.
· 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: Letal dose, 50 percent.
· LC50: Letal 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.

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

HISTORY:	Revision:
Version: 2	31/05/2015
Version: 3	01/09/2015

Modifications with respect to the previous Material Safety Data Sheet:
The possible legislative, contextual, numerical, methodological and normative changes with respect to the previous version are highlighted in this Material Safety Data Sheet by a mark # in red and italic.

The information of this Material Safety Data Sheet, is based on the present state of knowledge and on current UE and national laws, as the users' working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified, without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this Material Safety Data Sheet is meant as a description of the safety requirements of the product and it is not to be considered as a guarantee of the product's properties.