SERIE PLT9: 60 BN, 160, 160 HD,

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

Page n. 1/15

# Safety data sheet

## SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name SERIE PLT9: 60 BN, 160, 160 HD,

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

Intended use Pad Printing ink.

#### 1.3. Details of the supplier of the safety data sheet

Name COMEC ITALIA SRL

Full address PIAZZALE DEL LAVORO 149

District and Country 21044 CAVARIA VA

**ITALIA** 

tel. 0331 219516 fax 0331 216161

e-mail address of the competent person

responsible for the Safety Data Sheet info@comec-italia.it
Product distribution by EDGARDO BAGGINI

#### 1.4. Emergency telephone number

For urgent inquiries refer to +39 0331 219516 (8.00 - 12.30 13.30 - 17.30)

#### **SECTION 2. Hazards identification.**

#### 2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

#### 2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

 Flam. Liq. 3
 H226

 Eye Dam. 1
 H318

 Skin Irrit. 2
 H315

 Aquatic Chronic 3
 H412

#### 2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols:

Yi

R phrases:

10-41-52/53

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

#### 2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

SERIE PLT9: 60 BN, 160, 160 HD,

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

Page n. 2/15

#### Hazard pictograms:





Signal words:

Danger

#### Hazard statements:

H226 Flammable liquid and vapour. H318 Causes serious eye damage.

H315 Causes skin irritation.

H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements:

P210 Keep away from heat / sparks / open flames / hot surfaces. No smoking.

P233 Keep container tightly closed.

P264 Wash the hands thoroughly after handling.

P280

Wear protective gloves / protective clothing / eye protection / face protection.

IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower. P303+P361+P353

P310 Immediately call a POISON CENTER or doctor / physician.

Contains: **CYCLOHEXANONE** 

#### 2.3. Other hazards.

Information not available.

## **SECTION 3. Composition/information on ingredients.**

#### 3.1. Substances.

Information not relevant.

#### 3.2. Mixtures.

#### Contains:

Identification. CYCLOHEXANONE	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
CAS. 108-94-1	12 - 13,5	R10, Xn R20/21/22, Xi R38, Xi R41	Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Dam. 1 H318,
<b>50</b> 000 004 4			Skin Irrit. 2 H315

EC. 203-631-1

INDEX. 606-010-00-7

Reg. no. 01-2119453616-35-xxxx

#### **BUTYLGLYCOL ACETATE**

CAS. 112-07-2 EC. 203-933-3 7 - 8 Xn R20/21 Acute Tox. 4 H312, Acute Tox. 4 H332

INDEX. 607-038-00-2

SERIE PLT9: 60 BN, 160, 160 HD,

Revision nr. 4 Dated 19/10/2015

Printed on 26/10/2015

Page n. 3/15

Reg. no. 01-2119475112-47xxxx

Aromatic hydrocarbons, C9

CAS. 64742-95-6

5 - 6

5 - 6

R10, R66, R67, Xn R65, Xi R37, N R51/53, Note P

Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066, Note P

Flam. Liq. 3 H226

EC. 918-668-5

INDEX. 649-356-00-4

Reg. no. 01-2119486773-35-xxxx

2-METHOXY-1-METHYLETHYL ACETATE

CAS. 108-65-6

EC. 203-603-9

INDEX. 607-195-00-7

Reg. no. 01-2119475791-29-xxxx

**BUTANOL** 

CAS. 71-36-3

2 - 2,5

R10, R67, Xn R22, Xi R37/38, Xi R41

Flam. Lig. 3 H226, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336

EC. 200-751-6 INDEX. 603-004-00-6

Reg. no. 01-2119484630-38

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

R10

#### **SECTION 4. First aid measures.**

## 4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

## **SECTION 5. Firefighting measures.**

#### 5.1. Extinguishing media.

#### SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

# COMEC ITALIA SRL Revision nr. 4 Dated 19/10/2015 SERIE PLT9: 60 BN, 160, 160 HD, Printed on 26/10/2015 Page n. 4/15

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

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

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

#### 5.3. Advice for firefighters.

#### **GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

#### **SECTION 6. Accidental release measures.**

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

#### 6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

## 6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections.

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

## **SECTION 7. Handling and storage.**

#### 7.1. Precautions for safe handling.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

#### 7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

#### 7.3. Specific end use(s).

**SERIE PLT9: 60 BN, 160, 160 HD,** 

Dated 19/10/2015

Revision nr. 4

Printed on 26/10/2015

Page n. 5/15

Information not available.

## **SECTION 8. Exposure controls/personal protection.**

#### 8.1. Control parameters.

Regulatory References:

CYCLOHEXANONE Threshold Limit Value.

United Kingdom EH40/2005 Workplace exposure limits. Containing the list of workplace exposure

limits for use with the Control of Substances Hazardous to Health Regulations (as

amended).

Éire Code of Practice Chemical Agent Regulations 2011.

**OEL EU** Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive

2000/39/EC.

TLV-ACGIH **ACGIH 2012** 

Threshold Limit Value.		<b>T</b>		OTEL (:= :				
Type	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
OEL	EU	40,8	10	81,6	20	SKIN		
OEL	IRL	40,8	10	81,6	20	SKIN		
TLV-ACGIH		80	20	201	50			
WEL	UK	41	10	82	20	SKIN		
Predicted no-effect concentration -	PNEC.							
Normal value for the terrestrial cor Normal value in fresh water Normal value for water, intermitten Normal value in marine water Normal value for fresh water sedin Normal value for marine water sed Normal value of STP microorganis	nt release nent liment ems			0,0435 0,1 1 0,01 0,512 0,0512 10		mg/Kg mg/l mg/l mg/l mg/kg mg/kg mg/l		
Health - Derived no-effect le	vel - DNEL / DN Effects on	/IEL			Effects on			
Route of exposure	consumers. Acute local	Acute systemic	Chronic local	Chronic systemic	workers Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation.			VND	10 mg/m3			VND	40 mg/m3
Skin.			VND	1 mg/kg			VND	4 mg/kg/d
BUTYLGLYCOL ACETATE								
Threshold Limit Value. Type	Country	TWA/8h		STEL/15min				
Туро	Country	mg/m3	ppm	mg/m3	nnm			
OEL					ppm	SKIN		
	EU	133	20	333	50	_		
OEL	IRL	133	20	333	50	SKIN		
TLV-ACGIH		131	20			01/11		
WEL	UK	133	20	332	50	SKIN		
Predicted no-effect concentration -								
Normal value for the food chain (so Normal value for the terrestrial con Normal value in fresh water Normal value for water, intermitten Normal value in marine water Normal value for fresh water sedin	npartment at release	g)		0,06 0,06 0,304 0,56 0,0304 2,03 0,203		g/kg g/kg mg/l mg/l mg/l mg/l		

SERIE PLT9: 60 BN, 160, 160 HD,

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

Page n. 6/15

Health - Derived no-effect lev	Effects on consumers.	ncL .			Effects on			
Route of exposure								
	Acute local	Acute systemic	Chronic local	Chronic systemic	workers Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.	VND	18 mg/kg/d	VND	4,3 mg/kg/d				
Inhalation. Skin.	166 mg/m3	499 mg/m3	VND VND	67 mg/m3 36 mg/kg/d	333 mg/m3 102 mg/kg/d	773 mg/m3 27 mg/kg/d	VND VND	133 mg/m3 102 mg/kg/d
Aromatic hydrocarbons, C9								
Threshold Limit Value.	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
TLV-ACGIH		100	20	250	50			
Health - Derived no-effect le	vel - DNEL / DN Effects on consumers.	/IEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	11 mg/kg				
Inhalation.			VND	32 mg/m3			VND	150 mg/m3
Skin.			VND	11 mg/kg			VND	25 mg/kg
2-METHOXY-1-METHYLETH	YL ACETATE							
Threshold Limit Value. Type	Country	TWA/8h		STEL/15min				
	,	mg/m3	ppm	mg/m3	ppm			
OEL	EU	275	50	550	100	SKIN		
OEL	IRL	275	50	550	100	SKIN		
WEL	UK	274	50	548	100			
Predicted no-effect concentration -	PNEC.							
Normal value for the terrestrial com Normal value in fresh water Normal value for water, intermitten Normal value in marine water Normal value for fresh water sedim Normal value for marine water sed Normal value of STP microorganis Health - Derived no-effect lev	t release nent iment ms	<b>NEL</b>		0,29 0,635 6,35 0,0635 3,29 0,329 100	Effects on	mg/kg mg/l mg/l mg/kg mg/l mg/l		
Route of exposure	consumers. Acute local	Acute systemic	Chronic local	Chronic	workers Acute local	Acute	Chronic local	Chronic
Oral.			VND	systemic 1,67 mg/kg		systemic		systemic
Inhalation.			VND	33 mg/m3			VND	272 mg/m3
Skin.			VND	54,8 mg/kg			VND	153,5 mg/kg
BUTANOL								
Threshold Limit Value.	_							
Type	Country	TWA/8h		STEL/15min				
0.51		mg/m3	ppm	mg/m3	ppm	014		
OEL TIME A COURT	IRL		20			SKIN		
TLV-ACGIH	LIIZ	61	20	454	F0	CIZINI		
WEL Predicted no-effect concentration -	UK PNEC.			154	50	SKIN		
Normal value for the terrestrial con				0,015		mg/kg		
Normal value for the terrestrial corr	npartinent			0,015		mg/l		

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

SERIE PLT9: 60 BN, 160, 160 HD,

Page n. 7/15

Normal value for water, intermittent release2,25mg/lNormal value in marine water0,0082mg/lNormal value for fresh water sediment0,178mg/kgNormal value for marine water sediment0,0178mg/kgNormal value of STP microorganisms2476mg/l

Health - Derived no-effect level - DNEL / DMEL

Ticaltii - Delivea no-chect it	ACI - DIAFF / DI	VI L. L.							
	Effects on				Effects on				
	consumers.				workers				
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic	
				systemic		systemic		systemic	
Oral.			VND	3125 mg/kg		-		_	
Inhalation.			55 mg/m3	VND			310 mg/m3	VND	

#### Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

#### 8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

#### HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

#### EYE PROTECTION

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

Page n. 8/15

## **SERIE PLT9: 60 BN, 160, 160 HD,**

## **SECTION 9. Physical and chemical properties.**

#### 9.1. Information on basic physical and chemical properties.

Appearance liquid Colour various

Odour typical of solvent Odour threshold. Not available. Not available Melting point / freezing point. Not available. Initial boiling point. > 140 °C. Not available. Boiling range. Flash point. > 23 °C. **Evaporation Rate** Not available. Flammability of solids and gases Not available. Lower inflammability limit. Not available. Upper inflammability limit. Not available. Lower explosive limit. Not available. Upper explosive limit. Not available. Vapour pressure. Not available.

Vapour density Not available. Relative density. Not available.

Solubility soluble in water and in polar solvents

Partition coefficient: n-octanol/water
Auto-ignition temperature.
Decomposition temperature.
Viscosity
Not available.
Explosive properties
Oxidising properties
Not available.
Not available.
Not available.
Not available.

#### 9.2. Other information.

Information not available.

## SECTION 10. Stability and reactivity.

#### 10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

1-METHOXY-2-PROPANOL ACETATE: stable but with the air it may slowly develop peroxides that explode with an increase in temperature. BUTANOL: attacks various types of plastic.

CYCLOHEXANONE: may condense under the effect of heat to form resinous compounds. Attacks various types of plastic.

#### 10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

#### 10.3. Possibility of hazardous reactions.

The vapours may also form explosive mixtures with the air.

1-METHOXY-2-PROPANOL ACETATE: may react violently with oxidising agents and strong acids and alkaline metals.

BUTANOL: reacts violently developing heat with: aluminium, strong oxidising agents, strong reducing agents, hydrochloric acid. Forms explosive mixtures with the air.

CYCLOHEXANONE: risk of explosion on contact with: hydrogen peroxide, nitric acid, heat, mineral acids. Can react violently with oxidising agents. Forms explosive mixtures with the air.

#### 10.4. Conditions to avoid.

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

Page n. 9/15

**SERIE PLT9: 60 BN, 160, 160 HD,** 

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

1-METHOXY-2-PROPANOL ACETATE: store in an inert atmosphere, sheletered from moisture because it hydrolises easily.

BUTANOL: avoid exposure to sources of heat and naked flames.

CYCLOHEXANONE: avoid exposure to sources of heat and naked flames.

#### 10.5. Incompatible materials.

1-METHOXY-2-PROPANOL ACETATE: oxidising agents, strong acids and alkaline metals.

#### 10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

## **SECTION 11. Toxicological information.**

#### 11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapour inhalation may slightly irritate the upper respiratory trait. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

1-METHOXY-2-PROPANOL ACETATE: the main way of entry is the skin, whereas the respiratory way is less important owing to the low vapour tension of the product. Concentrations above 100 ppm cause eye irritation, nose and oropharynx. At 1000 ppm disturbance in the equilibrium and severe eye irritation is observed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and ocular irritation on direct contact. No chronic effects have been reported in man.

### 2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Oral). > 5000 mg/kg Ratto / Rat

LD50 (Dermal). > 2000 mg/kg Ratto / Rat

LC50 (Inhalation). > 4345 ppm/6h Ratto / Rat

#### BUTANOL

LD50 (Oral). 790 mg/kg Rat

LD50 (Dermal). 3400 mg/kg Rabbit

LC50 (Inhalation). 8000 ppm/4h Rat

#### CYCLOHEXANONE

LD50 (Oral). 1535 mg/Kg Ratto / Rat

LD50 (Dermal). 1100 mg/Kg Coniglio / Rabbit

LC50 (Inhalation). 11 mg/l/4h Ratto / Rat (4h)

#### BUTYLGLYCOL ACETATE

LD50 (Oral). 2000 mg/Kg Ratto / Rat

LD50 (Dermal). 2000 mg/Kg Coniglio / Rabbit

Aromatic hydrocarbons, C9

LD50 (Oral). > 2000 mg/Kg

LD50 (Dermal). > 2000 mg/Kg

LC50 (Inhalation). > 5 mg/l

SERIE PLT9: 60 BN, 160, 160 HD,

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

Page n. 10/15

## **SECTION 12. Ecological information.**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment. 12.1. Toxicity.

#### 2-METHOXY-1-METHYLETHYL ACETATE

LC50 - for Fish.

134 mg/l/96h Pesce, Oncorhynchus mykiss OECD 203

EC50 - for Crustacea.

> 500 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants.

> 1000 mg/l/72h Selenastrum capricornutum OECD 201

Chronic NOEC for Fish.

47,5 mg/l Oryzias latipes 14 gg OECD 204

Chronic NOEC for Crustacea.

100 mg/l Dapnia magna 21 gg OECD 202

#### BUTANOL

LC50 - for Fish.

> 100 mg/l/96h Pimephales promelas

EC50 - for Crustacea.

> 100 mg/l/48h Daphnia magna

#### CYCLOHEXANONE

EC50 - for Crustacea.

527 mg/l/96h Fish, Pimephales promelas (96h)

EC50 - for Algae / Aquatic Plants.

> 100 mg/l/72h Scenedesmus subspicatus

#### BUTYLGLYCOL ACETATE

LC50 - for Fish.

> 10 mg/l/96h Fish 10-100 mg/kg (48h)

EC50 - for Crustacea.

> 100 mg/l/48h Daphnia Magna (24h)

EC50 - for Algae / Aquatic Plants.

> 100 mg/l/72h Scenedesmus subspicatus

#### Aromatic hydrocarbons, C9

LC50 - for Fish.

> 1 mg/l/96h ALGHE: TOSSICO: 1< LC/EC/IC50 <= 10 mg/l

EC50 - for Crustacea.

> 10 mg/l/48h INVERTEBRATI ACQUATICI: TOSSICO: 1 < LC/EC/IC50 <= 10 mg/l

EC50 - for Algae / Aquatic Plants.

> 100 mg/l/72h PESCE: TOSSICO: 1 < LC/EC/IC50 <= 10 mg/l

## 12.2. Persistence and degradability.

Biodegrabilità aerobica ultima Facilmente biodegradabile 98 % - 19 d Metodo: OECD TG 301 Rapporti non pubblicati.

#### 2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water.

198000 mg/l

Rapidly biodegradable.

#### BUTANOL

Rapidly biodegradable.

#### CYCLOHEXANONE

Solubility in water.

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

1210

Page n. 11/15

SERIE PLT9: 60 BN, 160, 160 HD,

86 g/l Rapidly biodegradable.

BUTYLGLYCOL ACETATE Rapidly biodegradable.

Aromatic hydrocarbons, C9 Rapidly biodegradable.

12.3. Bioaccumulative potential.

Bioconcentration factor (BCF): 2.7 Bibliographic Not bioaccumulative.

2-METHOXY-1-METHYLETHYL ACETATE Partition coefficient: n-octanol/water. 1,2 mg/l

BUTANOL BCF.

12.4. Mobility in soil.

Information not available.

#### 12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%. 12.6. Other adverse effects.

Information not available.

# SECTION 13. Disposal considerations.

#### 13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Avoid littering. Do not contaminate soil, sewers and waterways.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## **SECTION 14. Transport information.**

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Koad	and	raii	trai	ารро	rt:
			- /-		

ADR/RID Class: 3 UN:

Packing Group:

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

Page n. 12/15

SERIE PLT9: 60 BN, 160, 160 HD,

 Label:
 3

 Nr. Kemler:
 30

 Limited Quantity.
 5 L

 Tunnel restriction code.
 (D/E)

Proper Shipping Name: PRINTING INK or PRINTING INK RELATED MATERIAL

Special Provision: 640E

Carriage by sea (shipping):

IMO Class: 3 UN: 1210

Packing Group: III
Label: 3
EMS: F-E, S-D
Marine Pollutant. NO

Proper Shipping Name: PRINTING INK or PRINTING INK RELATED MATERIAL

Transport by air:

IÁTA: 3 UN: 1210

Packing Group: III Label: 3

Cargo:

Packaging instructions: 366 Maximum quantity: 220 L

Pass.:

Packaging instructions: 355 Maximum quantity: 60 L

Special Instructions: A3, A72

Proper Shipping Name: PRINTING INK or PRINTING INK RELATED MATERIAL

## **SECTION 15. Regulatory information.**

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

Seveso category.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.

Point. 3 - 40

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

SERIE PLT9: 60 BN, 160, 160 HD,

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

Page n. 13/15

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

#### 15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

#### **SECTION 16. Other information.**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3 Flammable liquid, category 3

Acute Tox. 4 Acute toxicity, category 4

Asp. Tox. 1 Aspiration hazard, category 1

Eye Dam. 1 Serious eye damage, category 1

Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.

H315 Causes skin irritation.

H335 May cause respiratory irritation.H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.H412 Harmful to aquatic life with long lasting effects.

**EUH066** Repeated exposure may cause skin dryness or cracking.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R10 FLAMMABLE.

SERIE PLT9: 60 BN, 160, 160 HD,

HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.

Revision nr. 4

Dated 19/10/2015

Printed on 26/10/2015

Page n. 14/15

R20/21/22 HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

R22 HARMFUL IF SWALLOWED.

R37 IRRITATING TO RESPIRATORY SYSTEM.

R37/38 IRRITATING TO RESPIRATORY SYSTEM AND SKIN.

R38 IRRITATING TO SKIN.

R41 RISK OF SERIOUS DAMAGE TO EYES.

R51/53 TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE

EFFECTS IN THE AQUATIC ENVIRONMENT.

R52/53 HARMFUL TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE

EFFECTS IN THE AQUATIC ENVIRONMENT.

R65 HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

R66 REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.

VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS. **R67** 

#### LEGEND:

R20/21

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

## GENERAL BIBLIOGRAPHY

- 1. Directive 1999/45/EC and following amendments
- 2. Directive 67/548/EEC and following amendments and adjustments
- 3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 4. Regulation (EC) 1272/2008 (CLP) of the European Parliament 5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 6. Regulation (EC) 453/2010 of the European Parliament
- 7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament 8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
- 9. The Merck Index. 10th Edition
- 10. Handling Chemical Safety
- 11. Niosh Registry of Toxic Effects of Chemical Substances
- 12. INRS Fiche Toxicologique (toxicological sheet)
- 13. Patty Industrial Hygiene and Toxicology
- 14. N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition

COMEC ITALIA SKL	Revision nr. 4  Dated 19/10/2015
SERIE PL19: 60 BN, 160, 160 HD,	Printed on 26/10/2015 Page n. 15/15

#### 15. ECHA website

FOR PROFESSIONAL USE ONLY

This safety data sheet is prepared in accordance with the instructions provided on the relevant safety data sheets by our suppliers.

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review: The following sections were modified: 01 / 02 / 08 / 11 / 12 / 16.