

## Safety data sheet

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

**1.1. Product identifier**Product name **MB SERIES INK****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 **INKCUPS CORPORATION**  
Full address **310 ANDOVER ST.**  
District and Country **DANVERS, MA 01945**  
**USA**  
**Tel. 978-646-8980**

e-mail address of the competent person  
responsible for the Safety Data Sheet **compliance@inkcups.com**  
Product distribution by: **INKCUPS CORP.**

**1.4. Emergency telephone number**For urgent inquiries refer to **1.800.424.9300**

### 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.

## Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Acute toxicity, category 4	H302	Harmful if swallowed.
Serious eye damage, category 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

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

Hazard pictograms:

## MB SERIES



Signal words:                      Danger

### Hazard statements:

**H226**                      Flammable liquid and vapour.  
**H302**                      Harmful if swallowed.  
**H318**                      Causes serious eye damage.  
**H412**                      Harmful to aquatic life with long lasting effects.

### Precautionary statements:

**P210**                      Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
**P273**                      Avoid release to the environment.  
**P280**                      Wear protective gloves / eye protection / face protection.  
**P305+P351+P338**      IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P310**                      Immediately call a POISON CENTER or a doctor.  
**P370+P378**              In case of fire: use chemical powder, CO2 or dry send to extinguish.

**Contains:**                      CYCLOHEXANONE  
                                         BUTYLGLYCOL ACETATE

### 2.3. Other hazards

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

## SECTION 3. Composition/information on ingredients

### 3.1. Substances

Information not relevant

### 3.2. Mixtures

Contains:

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

Identification	x = Conc. %	Classification 1272/2008 (CLP)
<b>2-METHOXY-1-METHYLETHYL ACETATE</b>		
CAS 108-65-6	21 ≤ x < 22,5	Flam. Liq. 3 H226
EC 203-603-9		
INDEX 607-195-00-7		
Reg. no. 01-2119475791-29-xxxx		

## MB SERIES

### BUTYLGLYCOL ACETATE

CAS 112-07-2  $19,5 \leq x < 21$  Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332

EC 203-933-3

INDEX 607-038-00-2

Reg. no. 01-2119475112-47xxxx

### CYCLOHEXANONE

CAS 108-94-1  $4,5 \leq x < 5$  Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Dam. 1 H318, Skin Irrit. 2 H315

EC 203-631-1

INDEX 606-010-00-7

Reg. no. 01-2119453616-35-xxxx

### Hydrocarbons, C10, aromatics, <1% naphtalene

CAS -  $2,5 \leq x < 3$  Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066

EC 918-811-1

INDEX -

Reg. no. 01-2119463583-34-xxxx

### 4,4'-ISOPROPYLIDENEDIPHENOL

CAS 80-05-7  $0 \leq x < 0,1$  Repr. 2 H361f, Eye Dam. 1 H318, STOT SE 3 H335, Skin Sens. 1 H317, Aquatic Chronic 2 H411

EC 201-245-8

INDEX 604-030-00-0

Reg. no. 2119457856-23-xxxx

## 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 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

**INHALATION:** Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

**INGESTION:** Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

### 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

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.

Send away individuals who are not suitably equipped. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

## 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. If the product is flammable, use explosion-proof equipment. 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. 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)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

## MB SERIES

BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г
CZE	Česká Republika	Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diaro da Republica I 26; 2012-02-06
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
TUR	Türkiye	2000/39/EC sayılı Direktifin ekidir
EU	OEL EU	Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2016

### 2-METHOXY-1-METHYLETHYL ACETATE

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	275		550		SKIN
TLV	CZE	270		550		SKIN
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
TLV	DNK	275	50			SKIN
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	
VLEP	ITA	275	50	550	100	SKIN
NDS	POL	260		520		
VLE	PRT	275	50	550	100	SKIN
MAK	SWE	250	50	400	75	SKIN
ESD	TUR	275	50	550	100	SKIN
OEL	EU	275	50	550	100	SKIN

#### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,635	mg/l
Normal value in marine water	0,0635	mg/l
Normal value for fresh water sediment	3,29	mg/kg
Normal value for marine water sediment	0,329	mg/l
Normal value for water, intermittent release	6,35	mg/l
Normal value of STP microorganisms	100	mg/l

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Normal value for the terrestrial compartment 0,29 mg/kg

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers			Chronic local	Chronic systemic
	Acute local	Acute systemic	Chronic local	Acute local	Acute systemic	Chronic local		
Oral			VND	Chronic systemic 1,67 mg/kg				
Inhalation			VND	33 mg/m3			VND	272 mg/m3
Skin			VND	54,8 mg/kg			VND	153,5 mg/kg

### BUTYLGLYCOL ACETATE

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	133		333		SKIN
TLV	CZE	130		300		SKIN
AGW	DEU	130	20	520	80	SKIN
MAK	DEU	66	10	132	20	SKIN
TLV	DNK	130	20			SKIN
VLA	ESP	133	20	333	50	SKIN
VLEP	FRA	66,5	10	333	50	SKIN
WEL	GBR	133	20	332	50	SKIN
VLEP	ITA	133	20	333	50	SKIN
NDS	POL	100		300		
VLE	PRT	133	20	333	50	SKIN
MAK	SWE	70	10	140	20	SKIN
ESD	TUR	133	20	333	50	SKIN
OEL	EU	133	20	333	50	SKIN
TLV-ACGIH		131	20			

### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,304	mg/l
Normal value in marine water	0,0304	mg/l
Normal value for fresh water sediment	2,03	mg/l
Normal value for marine water sediment	0,203	mg/l
Normal value for water, intermittent release	0,56	mg/l
Normal value of STP microorganisms	90	mg/l
Normal value for the food chain (secondary poisoning)	0,06	g/kg
Normal value for the terrestrial compartment	0,06	g/kg

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers			Chronic local	Chronic systemic
	Acute local	Acute systemic	Chronic local	Acute local	Acute systemic	Chronic local		
Oral	VND	18 mg/kg/d	VND	Chronic systemic 4,3 mg/kg/d				
Inhalation	166 mg/m3	499 mg/m3	VND	67 mg/m3	333 mg/m3	773 mg/m3	VND	133 mg/m3
Skin			VND	36 mg/kg/d	102 mg/kg/d	27 mg/kg/d	VND	102 mg/kg/d

### CYCLOHEXANONE

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	40,8		81,6		SKIN

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TLV	CZE	40		80		SKIN
AGW	DEU	80	20	80	20	SKIN
TLV	DNK	40	10			
VLA	ESP	41	10	82	20	SKIN
VLEP	FRA	40,8	10	81,6	20	
WEL	GBR	41	10	82	20	SKIN
VLEP	ITA	40,8	10	81,6	20	SKIN
NDS	POL	40		80		
VLE	PRT	40,8	10	81,6	20	SKIN
MAK	SWE	41	10	81	20	SKIN
ESD	TUR	40,8	10	81,6	20	SKIN
OEL	EU	40,8	10	81,6	20	SKIN
TLV-ACGIH		80	20	201	50	

### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,1	mg/l
Normal value in marine water	0,01	mg/l
Normal value for fresh water sediment	0,512	mg/kg
Normal value for marine water sediment	0,0512	mg/kg
Normal value for water, intermittent release	1	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,0435	mg/kg

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	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

### Hydrocarbons, C10, aromatics, <1% naphthalene

#### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	7,5 mg/kg/d				
Inhalation			VND	32 mg/m3			VND	151 mg/m3
Skin			VND	7,5 mg/kg/d			VND	12,5 mg/kg/d

### SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM

#### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	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

### 4,4'-ISOPROPYLIDENEDIPHENOL

#### Threshold Limit Value

Type	Country	TWA/8h	ppm	STEL/15min	ppm
		mg/m3	ppm	mg/m3	ppm



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VLA	ESP	10		
VLEP	FRA	10		
VLEP	ITA	10		
NDS	POL	5	10	
VLE	PRT	10		
OEL	EU	2		INHAL

### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,018	mg/l
Normal value in marine water	0,016	mg/l
Normal value of STP microorganisms	320	mg/l
Normal value for the terrestrial compartment	3,7	mg/kg

### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Chronic local	Chronic systemic	
Oral							0,05 mg/kg bw/d	0,05 mg/kg bw/d
Inhalation	5 mg/m3	5 mg/m3	5 mg/m3	0,25 mg/m3			10 mg/m3	10 mg/m3
Skin		0,7 mg/kg bw/d		0,7 mg/kg bw/d			1,4 mg/kg bw/d	1,4 mg/kg bw/d

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 I 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).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

### 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.

## 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
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	> 140 °C
Boiling range	Not available
Flash point	23 ≤ T ≤ 60 °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	Not available
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

### 9.2. Other information

Information not available

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

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

### 2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

### CYCLOHEXANONE

Attacks various types of plastic materials.

May condense under the effect of heat to form resinous compounds.

#### 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.

### 2-METHOXY-1-METHYLETHYL ACETATE

May react violently with: oxidising substances, strong acids, alkaline metals.

### CYCLOHEXANONE

Risk of explosion on contact with: hydrogen peroxide, nitric acid, heat, mineral acids. May react violently with: oxidising agents. Forms explosive mixtures with: air.

#### 10.4. Conditions to avoid

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

### CYCLOHEXANONE

Avoid exposure to: sources of heat, naked flames.

#### 10.5. Incompatible materials

### 2-METHOXY-1-METHYLETHYL ACETATE

Incompatible with: oxidising substances, strong acids, 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

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.

### 11.1. Information on toxicological effects

Hydrocarbons, C10, aromatics, <1% naphthalene  
Specific target organ toxicity (STOT) - single exposure:  
NOAEC > 600 mg / kg Inhalation. Rat

#### Metabolism, toxicokinetics, mechanism of action and other information

2-METHOXY-1-METHYLETHYL ACETATE

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

#### Information on likely routes of exposure

2-METHOXY-1-METHYLETHYL ACETATE

WORKERS: inhalation; contact with the skin.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

2-METHOXY-1-METHYLETHYL ACETATE

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

#### Interactive effects

Information not available

#### ACUTE TOXICITY

LC50 (Inhalation) of the mixture: > 20 mg/l

LD50 (Oral) of the mixture: 1923 mg/kg

LD50 (Dermal) of the mixture: > 2000 mg/kg

Hydrocarbons, C10, aromatics, <1% naphthalene

6318 mg/kg Ratto / Rat

LD50 (Oral)

> 2000 mg/kg Coniglio / Rabbit

LD50 (Dermal)

> 4688 mg/kg/4h Ratto / Rat

LC50 (Inhalation)

4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer

> 2000 mg/kg Ratto / Rat

LD50 (Oral)

> 2000 mg/kg Ratto / Rat

LD50 (Dermal)

2-METHOXY-1-METHYLETHYL ACETATE

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8530 mg/kg Rat  
LD50 (Oral)  
> 5000 mg/kg Rat  
LD50 (Dermal)  
> 4345 ppm/6h Ratto / Rat  
LC50 (Inhalation)

CYCLOHEXANONE  
1535 mg/kg Ratto / Rat  
LD50 (Oral)  
1100 mg/kg Coniglio / Rabbit  
LD50 (Dermal)  
11 mg/l/4h Ratto / Rat (4h)  
LC50 (Inhalation)

BUTYLGLYCOL ACETATE  
2000 mg/kg Ratto / Rat  
LD50 (Oral)  
2000 mg/kg Coniglio / Rabbit  
LD50 (Dermal)

4,4'-ISOPROPYLIDENEDIPHENOL  
> 2000 mg/kg Rat  
LD50 (Oral)  
3000 mg/kg Rabbit  
LD50 (Dermal)

### SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

### RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

### STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## 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

Hydrocarbons, C10,  
aromatics, <1% naphtalene  
LC50 - for Fish > 2 mg/l/96h  
EC50 - for Crustacea > 3 mg/l/48h Daphnia magna  
EC50 - for Algae / Aquatic  
Plants > 1 mg/l/72h

2-METHOXY-1-  
METHYLETHYL ACETATE

## MB SERIES

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 Daphnia magna 21 gg OECD 202

### 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

### 4,4'-ISOPROPYLIDENEDIPHENOL

LC50 - for Fish	9,4 mg/l/96h Menidia menidia
EC50 - for Crustacea	10,2 mg/l/48h Daphnia magna

## 12.2. Persistence and degradability

Hydrocarbons, C10, aromatics, <1% naphthalene  
Solubility in water

immiscibile in H2O mg/l

Rapidly degradable

2-METHOXY-1-METHYLETHYL ACETATE  
Solubility in water

> 10000 mg/l

Rapidly degradable

### CYCLOHEXANONE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

### BUTYLGLYCOL ACETATE

Rapidly degradable

4,4'-

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ISOPROPYLIDENEDIPHEN

OL

Solubility in water 301 mg/l

Rapidly degradable

### 12.3. Bioaccumulative potential

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water 1,2

CYCLOHEXANONE

Partition coefficient: n-octanol/water 0,86

BUTYLGLYCOL ACETATE

Partition coefficient: n-octanol/water 1,51

4,4'-ISOPROPYLIDENEDIPHEN  
OL

Partition coefficient: n-octanol/water 3,4

### 12.4. Mobility in soil

CYCLOHEXANONE

Partition coefficient: soil/water 1,18

4,4'-ISOPROPYLIDENEDIPHEN  
OL

Partition coefficient: soil/water 2,95

### 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

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### 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.

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

### 14.1. UN number

ADR / RID, IMDG, IATA: 1210

### 14.2. UN proper shipping name

ADR / RID: PRINTING INK or  
PRINTING INK  
RELATED  
MATERIAL  
IMDG: PRINTING INK or  
PRINTING INK  
RELATED  
MATERIAL  
IATA: PRINTING INK or  
PRINTING INK  
RELATED  
MATERIAL

### 14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



### 14.4. Packing group

ADR / RID, IMDG, IATA: III

### 14.5. Environmental hazards

ADR / RID: NO

IMDG: NO

IATA: NO



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### 14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
IMDG:	Special Provision: - EMS: F-E, S-D	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special Instructions:	A3, A72, A192	

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

Information not relevant

## SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: P5c

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

Product  
Point 3 - 40

#### Contained substance

Point 66 4,4'-ISOPROPYLIDENEDIPHENOL  
Reg. no.: 2119457856-23-xxxx

#### Substances in Candidate List (Art. 59 REACH)

4,4'-ISOPROPYLIDENEDIPHENOL

Reg. no.: 2119457856-23-xxxx

#### Substances subject to authorisation (Annex XIV REACH)

None

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

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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:

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Repr. 2</b>	Reproductive toxicity, category 2
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H226</b>	Flammable liquid and vapour.
<b>H361f</b>	Suspected of damaging fertility.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H318</b>	Causes serious eye damage.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.

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<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

### LEGEND:

- 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. Regulation (EU) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

### 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

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Dated 3/1/2020

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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:  
08 / 11 / 12 / 14.