

according to Regulation (EC) No 1907/2006

# ORALITE® 5018 Screen Printing Ink (073)

Product code: SDF5018-073N Revision date: 19.05.2021 Page 1 of 17

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

### 1.1. Product identifier

ORALITE® 5018 Screen Printing Ink (073)

#### Further trade names

ORALITE® Siebdruckfarbe 5018-073

Colour: grey (073)

UFI: DGF2-TMC0-JN4A-YMUU

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

#### Use of the substance/mixture

Colour (Screen Printing Ink) Reserved for industrial and professional use.

#### Uses advised against

Do not use for private purposes (household).

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

Company name: **ORAFOL Europe GmbH** 

Germany

Street: Orafolstraße 1

Place: D-16515 Oranienburg

Telephone: + 49 3301 864 0 Telefax: + 49 3301 864 100

e-mail: msds@orafol.de Internet: www.orafol.com

1.4. Emergency telephone National Poison Information Service: In case of a medical emergency following

exposure to a chemical, the public should call NHS Direct in England or Wales number:

0845 46 47 or NHS 24 in Scotland 08454 24 24 24 (UK only).

# **SECTION 2: Hazards identification**

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

#### Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 3

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Flammable liquid and vapour.

Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



# **Hazard statements**

H226 Flammable liquid and vapour.

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.

P243 Take action to prevent static discharges.



according to Regulation (EC) No 1907/2006

**ORALITE® 5018 Screen Printing Ink (073)** 

Revision date: 19.05.2021 Product code: SDF5018-073N Page 2 of 17

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

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

or shower.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

Special labelling of certain mixtures

EUH208 Contains Reaction mass of 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and methyl

1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.

#### 2.3. Other hazards

No information available.

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

#### 3.2. Mixtures

#### **Hazardous components**

CAS No	Chemical name			Quantity	
	EC No	Index No	REACH No		
	GHS Classification	-			
1330-20-7	xylene			5 - < 10 %	
	215-535-7	601-022-00-9	01-2119488216-32		
108-65-6	2-methoxy-1-methylethyl aceta	5 - < 10 %			
	203-603-9	607-195-00-7	01-2119475791-29		
	Flam. Liq. 3, STOT SE 3; H226	6 H336			
112-07-2	2-butoxyethyl acetate, butylgly	col acetate		5 - < 10 %	
	203-933-3	607-038-00-2	01-2119475112-47		
	Acute Tox. 4, Acute Tox. 4, Acu	ite Tox. 4; H332 H312 H302			
1065336-91-5	Reaction mass of 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate		e and methyl	< 1 %	
	915-687-0		01-2119491304-40		
	Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H317 H400 H410				

Full text of H and EUH statements: see section 16.

### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity		
	Specific Conc. I	Limits, M-factors and ATE			
1330-20-7	215-535-7	xylene	5 - < 10 %		
	inhalation: LC50 = 5922 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 12126 mg/kg; oral: LD50 = 3523 mg/kg				
108-65-6	203-603-9	2-methoxy-1-methylethyl acetate	5 - < 10 %		
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 6190 - 10000 mg/kg				
112-07-2	2 203-933-3 2-butoxyethyl acetate, butylglycol acetate				
		= 11 mg/l (vapours); inhalation: LC50 = 2,66 mg/l (dusts or mists); dermal: LD50 kg; oral: LD50 = ca. 1880 mg/kg			
1065336-91-5	915-687-0	Reaction mass of 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	< 1 %		
	dermal: LD50 = > 3170 mg/kg; oral: LD50 = 3230 mg/kg M akut; H400: M=1				



### **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 3 of 17

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

#### After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

#### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

#### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. If eye irritation persists: Get medical advice/attention.

#### After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting.

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

No information available.

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

Treat symptomatically.

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

### Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder.

### Unsuitable extinguishing media

Full water jet

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

Flammable. Vapours can form explosive mixtures with air. Hazardous combustion products: Carbon dioxide (CO2), Carbon monoxide (CO), Sulphur oxides, Silicon dioxide (SiO2).

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. The danger areas must be delimited and identified using relevant warning and safety signs. Heating causes rise in pressure with risk of bursting. The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration. Beware of reignition.

### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

# **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

### General measures

Remove all sources of ignition. Use personal protection equipment. Provide adequate ventilation.

#### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk. Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.



### **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 4 of 17

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

#### Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

# Advice on safe handling

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

#### Further information on handling

Thermal hazards: Hazardous decomposition products: Methyl methacrylate, dodecyl methacrylate, Phenol, Sulphur dioxide (SO2).

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

### Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep/Store only in original container.

#### Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

# Further information on storage conditions

 $\label{thm:container} \mbox{Unsuitable container/equipment material: Copper, Aluminium, Zinc.}$ 

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

Colour (Screen Printing Ink)

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

## 8.1. Control parameters

### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
108-65-6	1-Methoxypropyl acetate	50	274		TWA (8 h)	WEL
		100	548		STEL (15 min)	WEL
112-07-2	2-Butoxyethyl acetate	20	133		TWA (8 h)	WEL
		50	332		STEL (15 min)	WEL
110-82-7	Cyclohexane	100	350		TWA (8 h)	WEL
		300	1050		STEL (15 min)	WEL
80-62-6	Methyl methacrylate	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 5 of 17

# **Biological Monitoring Guidance Values (EH40)**

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift



according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 6 of 17

# **DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
1330-20-7	xylene			
Worker DNEL	, long-term	inhalation	systemic	221 mg/m³
Worker DNEL	, acute	inhalation	systemic	442 mg/m³
Worker DNEL	, long-term	inhalation	local	221 mg/m³
Worker DNEL	, acute	inhalation	local	442 mg/m³
Worker DNEL	, long-term	dermal	systemic	212 mg/kg bw/da
Consumer DN	IEL, long-term	inhalation	systemic	65,3 mg/m³
Consumer DN	IEL, acute	inhalation	systemic	260 mg/m³
Consumer DN	IEL, long-term	inhalation	local	65,3 mg/m³
Consumer DN	IEL, acute	inhalation	local	260 mg/m³
Consumer DN	IEL, long-term	dermal	systemic	125 mg/kg bw/da
Consumer DN	IEL, long-term	oral	systemic	12,5 mg/kg bw/day
108-65-6	2-methoxy-1-methylethyl acetate			
Worker DNEL	, long-term	inhalation	systemic	275 mg/m³
Worker DNEL	, acute	inhalation	local	550 mg/m³
Worker DNEL	, long-term	dermal	systemic	796 mg/kg bw/da
Consumer DN	IEL, long-term	inhalation	systemic	33 mg/m³
Consumer DN	IEL, long-term	inhalation	local	33 mg/m³
Consumer DN	IEL, long-term	dermal	systemic	320 mg/kg bw/da
Consumer DN	IEL, long-term	oral	systemic	36 mg/kg bw/day
112-07-2	2-butoxyethyl acetate, butylglycol acetate			
Worker DNEL	, acute	inhalation	local	333 mg/m³
Worker DNEL	, acute	dermal	systemic	120 mg/kg bw/da
Worker DNEL	, acute	inhalation	systemic	775 mg/m³
Consumer DN	IEL, acute	dermal	systemic	72 mg/kg bw/day
Consumer DN	IEL, acute	inhalation	systemic	499 mg/m³
Consumer DN	IEL, acute	oral	systemic	36 mg/kg bw/day
Consumer DN	IEL, acute	inhalation	local	200 mg/m³
Consumer DN	IEL, long-term	dermal	systemic	102 mg/kg bw/da
Consumer DN	IEL, long-term	inhalation	systemic	80 mg/m³
Consumer DN	IEL, long-term	oral	systemic	8,6 mg/kg bw/da
Worker DNEL	, long-term	dermal	systemic	169 mg/kg bw/da
Worker DNEL	, long-term	inhalation	systemic	133 mg/m³
1065336-91- 5	Reaction mass of 1,2,2,6,6-pentamethyl-4-sebacate	piperidyl sebacate and methyl 1,2,2,6	6,6-pentamethyl-4-p	piperidyl
Worker DNEL	, acute	dermal	systemic	2,5 mg/kg bw/da
Worker DNEL	, acute	inhalation	systemic	2,35 mg/m³
Worker DNEL	, long-term	inhalation	systemic	0,68 mg/m³
Worker DNEL	, long-term	dermal	systemic	0,5 mg/kg bw/day

0,05 mg/kg

bw/day

systemic



Consumer DNEL, long-term

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

#### **ORALITE® 5018 Screen Printing Ink (073)** Product code: SDF5018-073N Page 7 of 17 Revision date: 19.05.2021 1,25 mg/kg bw/day Consumer DNEL, acute dermal systemic Consumer DNEL, acute inhalation 0,58 mg/m<sup>3</sup> systemic Consumer DNEL, acute oral 1,25 mg/kg systemic bw/day Consumer DNEL, long-term dermal 0,25 mg/kg systemic bw/day systemic Consumer DNEL, long-term inhalation 0,17 mg/m<sup>3</sup>

oral



according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 8 of 17

### **PNEC values**

CAS No	Substance	
	al compartment	Value
1330-20-7	xylene	valuo
Freshwater	Ayiono	0,327 mg/l
	intermittent releases)	0,327 mg/l
Marine water		0,327 mg/l
Freshwater s		12,46 mg/kg
Marine sedim		12,46 mg/kg
	sms in sewage treatment plants (STP)	6,58 mg/l
Soil	3 1 ( )	2,31 mg/kg
108-65-6	2-methoxy-1-methylethyl acetate	7. 3. 3
Freshwater		0,635 mg/l
Freshwater (	intermittent releases)	6,35 mg/l
Marine water	· · · · · · · · · · · · · · · · · · ·	0,064 mg/l
Freshwater s	ediment	3,29 mg/kg
Marine sedim	nent	0,329 mg/kg
Micro-organi:	sms in sewage treatment plants (STP)	100 mg/l
Soil		0,29 mg/kg
112-07-2	2-butoxyethyl acetate, butylglycol acetate	·
Freshwater	•	0,304 mg/l
Freshwater (i	intermittent releases)	0,56 mg/l
Marine water	•	0,03 mg/l
Freshwater s	ediment	2,03 mg/kg
Marine sedim	nent	0,203 mg/kg
Secondary po	oisoning	60 mg/kg
Micro-organis	sms in sewage treatment plants (STP)	90 mg/l
Soil		0,415 mg/kg
1065336-91- 5	Reaction mass of 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	entamethyl-4-piperidyl
Freshwater		0,002 mg/l
Freshwater (i	intermittent releases)	0,009 mg/l
Marine water	•	0 mg/l
Freshwater s	rediment	1,05 mg/kg
Marine sedim	nent	0,11 mg/kg
Micro-organis	sms in sewage treatment plants (STP)	1 mg/l
Soil		0,21 mg/kg

#### Additional advice on limit values

TRGS 900, 2-butoxyethyl acetate; butylglycol acetate & 2-methoxypropyl acetate & 2-methoxypropyl acetate:: Aerosol, vapour May be absorbed through the skin.

2-methoxypropyl acetate: Z: A risk of reproductive effects cannot to be excluded if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

Contains: Carbon Black (CAS 1333-86-4)



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 9 of 17

#### 8.2. Exposure controls





#### Appropriate engineering controls

Use explosion-proof ventilating equipment.

# Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

### Eye/face protection

Wear eye/face protection.

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Suitable gloves type Butyl caoutchouc (butyl rubber). Use gloves only once.

#### Skin protection

Wear suitable protective clothing.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

#### **Environmental exposure controls**

Collect spillage.

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

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

Physical state: Liquid Colour: grey

pH-Value: not determined

Changes in the physical state

Melting point: not determined

Boiling point or initial boiling point and ca. 139,1 °C

boiling range:

Flash point: 27 °C

**Flammability** 

Solid/liquid: not applicable
Gas: not applicable

# **Explosive properties**

The product is not: Explosive. Vapours can form explosive mixtures with air.

Lower explosion limits: 1,21 vol. %
Upper explosion limits: 7 vol. %
Auto-ignition temperature: >210 °C

Self-ignition temperature

Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined



### **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

### **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 10 of 17

**Oxidizing properties** 

Not oxidising.

Vapour pressure: 5.02 hPa

(at 20 °C)

Density: 1,01 g/cm³

Water solubility: The study does not need to be conducted

because the substance is known to be

insoluble in water.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Relative vapour density:

Evaporation rate:

Solvent content:

not determined
not determined
62 - 67%

9.2. Other information

Solid content: 33 - 38%

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Flammable. In use, may form flammable/explosive vapour-air mixture.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

### 10.5. Incompatible materials

Unsuitable container/equipment material: Copper, Aluminium, Zinc.

Avoid: Strong acid, Oxidising agent.

### 10.6. Hazardous decomposition products

Thermal hazards: Hazardous decomposition products: Methyl methacrylate, dodecyl methacrylate, Phenol, Sulphur dioxide (SO2).

Hazardous combustion products: Carbon dioxide (CO2), Carbon monoxide (CO), Sulphur oxides, Silicon dioxide (SiO2).

## **SECTION 11: Toxicological information**

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

#### Acute toxicity

Based on available data, the classification criteria are not met.



according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 11 of 17

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
1330-20-7	xylene							
	oral	LD50 mg/kg	3523	Rat	Study report (1986)	EU Method B.1		
	dermal	LD50 mg/kg	12126	Rabbit	Publication (1962)	Single dermal dose under occlusion follo		
	inhalation (4 h) vapour	LC50	5922 mg/l	Rat	Study report (1986)	EPA OPP 81-3		
	inhalation aerosol	ATE	1,5 mg/l					
108-65-6	2-methoxy-1-methylethyl	acetate						
	oral	LD50 10000 mg/	6190 - 'kg	Rat	Study report (1985)	OECD Guideline 401		
	dermal	LD50 mg/kg	> 2000	Rat	Study report (1985)	OECD Guideline 402		
112-07-2	2-butoxyethyl acetate, butylglycol acetate							
	oral	LD50 mg/kg	ca. 1880	Rat	Study report (1963)	OECD Guideline 401		
	dermal	LD50 mg/kg	ca. 1500	Rabbit	Toxicol Appl Pharmac 51, 117-27 (1979)	Modification of the Draize 1959 method u		
	inhalation vapour	ATE	11 mg/l					
	inhalation (4 h) aerosol	LC50	2,66 mg/l	Rat				
1065336-91- 5	Reaction mass of 1,2,2,6 sebacate	6,6-pentamet	hyl-4-piperid	yl sebacate and me	ethyl 1,2,2,6,6-pentamethyl-4-pi	peridyl		
	oral	LD50 mg/kg	3230	Rat	Study report (1981)	OECD Guideline 423		
	dermal	LD50 mg/kg	> 3170	Rat	Study report (1975)	OECD Guideline 402		

# Irritation and corrosivity

Based on available data, the classification criteria are not met.

### Sensitising effects

Contains Reaction mass of 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and methyl

1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.

# Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

# **Aspiration hazard**

Based on available data, the classification criteria are not met.

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Harmful to aquatic life with long lasting effects.

The product has not been tested. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 12 of 17

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
1330-20-7	xylene						
	Acute fish toxicity	LC50	8,4 mg/l	96 h	Oncorhynchus mykiss	Ecotoxicology and Environmental Safety.	OECD Guideline 203
	Acute algae toxicity	ErC50	4,6 mg/l	72 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety 1	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 3,4	48 h	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	other: US EPA 600/4-91-003
	Fish toxicity	NOEC mg/l	> 1,3	56 d	Oncorhynchus mykiss	Appl. Sci. Branch, Eng. Res. Cent. Denve	Fish were exposed in artificial streams
	Crustacea toxicity	NOEC mg/l	1,17	7 d	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	other: US EPA 600/4-91-003
	Acute bacteria toxicity	(> 175 m	g/l)	0,5 h	Activated sludge	Research Journal WPCF 60(10) 1850-1856 (	OECD Guideline 209
108-65-6	2-methoxy-1-methylethyl	acetate					
	Acute fish toxicity	LC50 180 mg/l	100 -	96 h	Oncorhynchus mykiss	Study report (1987)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 1000	96 h	Pseudokirchneriella subcapitata	Study report (1986)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 500	48 h	Daphnia magna	Study report (1987)	EU Method C.2
	Fish toxicity	NOEC mg/l	47,5	14 d	Oryzias latipes	Study report (1998)	OECD Guideline 204
	Crustacea toxicity	NOEC mg/l	>= 100	21 d	Daphnia magna	Study report (1998)	OECD Guideline 211
112-07-2	2-butoxyethyl acetate, but	ylglycol ace	tate				
	Acute fish toxicity	LC50 40 mg/l	> 20 - <	96 h	Oncorhynchus mykiss	Toxicol Mech & meth 12, 255-63 (2002)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	1570	72 h	Pseudokirchneriella subcapitata	Toxicol Mech & meth 12, 255-63 (2002)	ISO 8692
	Acute crustacea toxicity	EC50 mg/l	67,5	48 h	Daphnia magna	Toxicol Mech & meth 12, 255-63 (2002)	ISO 6341
1065336-91- 5	Reaction mass of 1,2,2,6, sebacate	6-pentameth	nyl-4-piperid	yl sebaca	ate and methyl 1,2,2,6,6-		/I
	Acute fish toxicity	LC50	0,9 mg/l	96 h	Danio rerio	Study report (2010)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	1,68	72 h	Desmodesmus subspicatus	Study report (2010)	OECD Guideline 201
	Acute crustacea toxicity	EC50	20 mg/l	48 h	Daphnia magna		
	Crustacea toxicity	NOEC	1 mg/l	21 d	Daphnia magna	Study report (2010)	OECD Guideline 211
	Acute bacteria toxicity	(> 100 m	g/l)	3 h			

# 12.2. Persistence and degradability



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 13 of 17

The product has not been tested.

CAS No	Chemical name						
	Method	Value	d	Source			
	Evaluation	-	-	-			
108-65-6	2-methoxy-1-methylethyl acetate						
	OECD 301F	83%	28				
	Readily biodegradable (according to OECD criteria).						
	OECD 302B	100%	28				
	Readily biodegradable (according to OECD criteria).						
112-07-2	2-butoxyethyl acetate, butylglycol acetate						
	OECD 301F	88%	28				
	Readily biodegradable (according to OECD criteria).						
1065336-91- 5	Reaction mass of 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate						
	OECD 301F; ISO 9408; 92/69/EWG, C.4-D	38%	28				
	Not readily biodegradable (according to OECD criteria) Moderately/partially biodegradable. 38 % DOC reduction						

### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1330-20-7	xylene	3,2
108-65-6	2-methoxy-1-methylethyl acetate	1,2
112-07-2	2-butoxyethyl acetate, butylglycol acetate	1,51
1065336-91-5	Reaction mass of 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	2,37

### **BCF**

CAS No	Chemical name	BCF	Species	Source
1330-20-7	xylene	> 5,5 - < 12,2	Oncorhynchus mykiss	Appl. Sci. Branch, E
1065336-91-5	Reaction mass of 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	< 9,7	Cyprinus carpio	Study report (1981)

# 12.4. Mobility in soil

The product has not been tested.

# 12.5. Results of PBT and vPvB assessment

The product has not been tested.

### 12.7. Other adverse effects

No information available.

#### **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. The product contains organically bound halogen as per formulation. It may increase the AOX value when discharged from treatment plants or into natural waters. AOX: Chlorine

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods



according to Regulation (EC) No 1907/2006

# ORALITE® 5018 Screen Printing Ink (073)

Revision date: 19.05.2021 Product code: SDF5018-073N Page 14 of 17

#### **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Dispose of this material and its container to hazardous or special waste collection point. Consult the appropriate local waste disposal expert about waste disposal.

#### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

## **SECTION 14: Transport information**

#### Land transport (ADR/RID)

14.1. UN number:UN 126314.2. UN proper shipping name:PAINT14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Classification code: F1

Special Provisions: 163 367 650

Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

# Inland waterways transport (ADN)

14.1. UN number:UN 126314.2. UN proper shipping name:Paint14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Classification code: F1

Special Provisions: 163 367 650

Limited quantity: 5 L Excepted quantity: E1

# Marine transport (IMDG)

14.1. UN number:UN 126314.2. UN proper shipping name:PAINT14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 15 of 17



Special Provisions: 163, 223, 367, 955

Limited quantity: 5 L
Excepted quantity: E1
EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:UN 126314.2. UN proper shipping name:PAINT14.3. Transport hazard class(es):314.4. Packing group:IIIHazard label:3



Special Provisions: A3 A72 A192

Limited quantity Passenger: 10 L
Passenger LQ: Y344
Excepted quantity: E1

IATA-packing instructions - Passenger:355IATA-max. quantity - Passenger:60 LIATA-packing instructions - Cargo:366IATA-max. quantity - Cargo:220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

# 14.6. Special precautions for user

Warning: flammable liquids

# 14.7. Maritime transport in bulk according to IMO instruments

not applicable

### **SECTION 15: Regulatory information**

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

# **EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 57

2010/75/EU (VOC): 65,99 % (666,501 g/l)
2004/42/EC (VOC): 65,99 % (666,501 g/l)
Information according to 2012/18/EU P5c FLAMMABLE LIQUIDS

(SEVESO III):

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.



according to Regulation (EC) No 1907/2006

# **ORALITE® 5018 Screen Printing Ink (073)**

Revision date: 19.05.2021 Product code: SDF5018-073N Page 16 of 17

#### **SECTION 16: Other information**

#### Changes

This data sheet contains changes from the previous version in section(s): 1,11,14.

#### Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

**UN: United Nations** 

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container
VOC: Volatile Organic Compounds
SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

# Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Aquatic Chronic 3; H412	Calculation method

## Relevant H and EUH statements (number and full text)

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.



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

ORALITE® 5018 Screen Printing Ink (073)			
Revision date: 19.05.2021	Product code: SDF5018-073N	Page 17 of 17	
H335	May cause respiratory irritation.		
H336	May cause drowsiness or dizziness.		
H373	May cause damage to organs through prolonged or repeated exposure.		
H400	Very toxic to aquatic life.		
H410	Very toxic to aquatic life with long lasting effects.		
H412	Harmful to aquatic life with long lasting effects.		
EUH208	Contains Reaction mass of 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and methyl		
	1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction.		

#### **Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)