

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ORALITE® Retarder

Revision date: 21.05.2021

Product code: 345900011

Page 1 of 9

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

1.1. Product identifier

ORALITE® Retarder

Further trade names

ORALITE® Retarder SV1, Retarder of Serigraphic Ink series ORALITE® 5010/5018

ORALITE® Verzögerer für die Siebdruckfarbe - Serie ORALITE® 5010/5018

ORALITE® VZ 5018

UFI: AP0N-J8T2-V84J-K66E

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

Use of the substance/mixture

Process regulator. For use in industrial installations only.

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 number:

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 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:

Serious eye damage/eye irritation: Eye Dam. 1

Reproductive toxicity: Repr. 2

Hazard Statements:

Causes serious eye damage.

Suspected of damaging the unborn child.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Butyl glycolate

Signal word: Danger

Pictograms:



Hazard statements

H318 Causes serious eye damage.

H361d Suspected of damaging the unborn child.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ORALITE® Retarder

Revision date: 21.05.2021

Product code: 345900011

Page 2 of 9

Precautionary statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing 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/doctor.
P337+P313	If eye irritation persists: Get medical advice/attention.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

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			
7397-62-8	Butyl glycolate			50 - < 100 %
	230-991-7		01-2119514685-36	
	Repr. 2, Eye Dam. 1; H361d H318			

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. Limits, M-factors and ATE		
7397-62-8	230-991-7	Butyl glycolate	50 - < 100 %
	oral: LD50 = 4595 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. If unconscious but breathing normally, place in recovery position and seek medical advice.

After inhalation

Provide fresh air. Medical treatment necessary. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After contact with skin

Take off immediately all contaminated clothing and wash it before reuse. After contact with skin, wash immediately with plenty of water and soap. Washing and cleaning products Unsuitable material: Solvents/Thinner

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ORALITE® Retarder

Revision date: 21.05.2021

Product code: 345900011

Page 3 of 9

immediate medical attention. 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**

Carbon dioxide (CO₂), alcohol resistant foam, Extinguishing powder, Water spray jet.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂). Burning produces heavy smoke.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. 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**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

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.

6.3. Methods and material for containment and cleaning up**For cleaning up**

Clear contaminated areas thoroughly. Clean with detergents. Avoid solvent cleaners.

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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. To follow: Occupational exposure limit values. Never use pressure to empty container. Read label before use.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Use

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ORALITE® Retarder

Revision date: 21.05.2021

Product code: 345900011

Page 4 of 9

explosion-proof machinery, apparatus, ventilation facilities, tools etc. Vapours can form explosive mixtures with air. The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Fire class: B

Temperature Class: T2

Further information on handling

When using do not eat, drink or smoke. Never use pressure to empty container.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent, Strong acid, Strong alkali.

Further information on storage conditions

Recommended storage temperature: 15 - 30 °C

Keep only in the original container in a cool, well-ventilated place. Avoid high temperatures or direct sunlight.

7.3. Specific end use(s)

Process regulator

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
7397-62-8	Butyl glycolate			
Worker DNEL, long-term		dermal	systemic	10 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	7,05 mg/m³
Consumer DNEL, long-term		oral	systemic	2 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	25 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	0,28 ppm
Consumer DNEL, long-term		inhalation	systemic	1,74 mg/m³

PNEC values

CAS No	Substance		
Environmental compartment	Value		
7397-62-8	Butyl glycolate		
Freshwater	0,023 mg/l		
Freshwater (intermittent releases)	0,231 mg/l		
Marine water	0,002 mg/l		
Freshwater sediment	0,094 mg/kg		
Marine sediment	0,009 mg/kg		
Micro-organisms in sewage treatment plants (STP)	3,71 mg/l		
Soil	0,005 mg/kg		

8.2. Exposure controls

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ORALITE® Retarder

Revision date: 21.05.2021

Product code: 345900011

Page 5 of 9



Appropriate engineering controls

Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles.

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: NBR (Nitrile rubber)

Thickness of the glove material > 0,5 mm

Permeation time (maximum wear time) < 30 min

Wear cotton undermitten if possible.

Breakthrough times and swelling properties of the material must be taken into consideration. The required protective gloves have to be specified by the glove material and the penetration time of the glove material depending on strength and duration of dermal exposition.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Filter type: A

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless - light yellow
Odour:	like: ester

	Test method
pH-Value:	not determined

Changes in the physical state

Melting point:	not determined
Boiling point or initial boiling point and boiling range:	180 °C
Flash point:	82 °C ASTM D 6450 (CCCFP)

Flammability

Solid/liquid:	not applicable
Gas:	not applicable

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ORALITE® Retarder

Revision date: 21.05.2021

Product code: 345900011

Page 6 of 9

Lower explosion limits:	1,3 vol. %
Upper explosion limits:	not determined
Auto-ignition temperature:	405 °C
Self-ignition temperature	
Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

Oxidizing properties

Not oxidising.

Vapour pressure:	1 hPa
(at 20 °C)	

Density (at 20 °C):	1,020 g/cm ³ ISO 2811
---------------------	----------------------------------

Water solubility:	not determined
-------------------	----------------

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
--	----------------

Flow time:	< 12 s 4 DIN 53211
(at 20 °C)	

Relative vapour density:	not determined
--------------------------	----------------

Evaporation rate:	not determined
-------------------	----------------

9.2. Other information

Solid content:	0 %
----------------	-----

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Oxidising agent, Strong acid, Strong alkali. Danger of bursting container.

10.4. Conditions to avoid

none No hazardous reaction when handled and stored according to provisions.

10.5. Incompatible materials

Do not store together with: Oxidising agent, Strong acid, Strong alkali.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂). Burning produces heavy smoke.

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ORALITE® Retarder

Revision date: 21.05.2021

Product code: 345900011

Page 7 of 9

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7397-62-8	Butyl glycolate				
	oral	LD50 mg/kg	4595	Rat	Other company data (1968) OECD Guideline 401

Irritation and corrosivity

Causes serious eye damage.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging the unborn child. (Butyl glycolate)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: 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.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

Practical experience

The inhalation of dust/mist or aerosols causes irritation of the respiratory tract. Ingestion causes nausea, weakness and central nervous system effects. Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation). After eye contact: Causes serious eye damage.

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h] [d]	Species	Source
7397-62-8	Butyl glycolate				
	Acute fish toxicity	LC50 mg/l	23,1	96 h	Danio rerio
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna
					REACH Registration Dossier
					OECD Guideline 203
					REACH Registration Dossier
					OECD Guideline 202

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7397-62-8	Butyl glycolate	0,38

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ORALITE® Retarder

Revision date: 21.05.2021

Product code: 345900011

Page 8 of 9

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

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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 waste according to applicable legislation. The waste code has to be identified in agreement with the disposal company or the competent authority.

List of Wastes Code - residues/unused products

080312 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of printing inks; waste ink containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

14.2. UN proper shipping name: No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ORALITE® Retarder

Revision date: 21.05.2021

Product code: 345900011

Page 9 of 9

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

2010/75/EU (VOC): 99,46 % (1014,492 g/l)

2004/42/EC (VOC): 99,46 % (1014,492 g/l)

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

Water hazard class (D): 1 - slightly hazardous to water

Additional information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none

This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH: none

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,8,9,10,11,13,15.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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

Classification	Classification procedure
Eye Dam. 1; H318	Calculation method
Repr. 2; H361d	Calculation method

Relevant H and EUH statements (number and full text)

H318 Causes serious eye damage.

H361d Suspected of damaging the unborn child.

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.)