

Safety Data Sheet

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SDS No.: 43602

V003.6

Revision: 23.06.2020 printing date: 06.09.2024

Section 1. Identification of the substance/preparation and of the company/undertaking

Product name:

AQUENCE FB 7371 known as Adhesin A 7371

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Other means of identification:

AQUENCE FB 7371 TH IBC25KG

Product code:

IDH373985

Recommended use of the chemical and restrictions on use

Intended use:

paper- and packaging adhesive

Identification of manufacturer, importer or distributor

Manufacturer: Henkel Thailand Ltd Amata Nakorn Industrial Estate, 700/349 Mu 6, Tambol Nong Mai Daeng, Amphur Muang, Chonburi 20000, Thailand. Phone: +6638456300 Fax: +6638456393

E-mail address of person responsible for Safety Data Sheet:

ap-ua-psra.sea@henkel.com

Emergency information:

FOR EMERGENCIES ONLY (Spill, major leak, Fire, Exposure, or Accident). Call CHEMTREC: +1 703-741-5970

Section 2. Hazards identification

GHS Classification:

Hazard Class

Hazard Category

Acute hazards to the aquatic environment

Category 3

GHS label elements:

Hazard statement:

H402 Harmful to aquatic life.

Precaution:

Prevention:

P273 Avoid release to the environment.

Disposal:

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Section 3. Composition / information on ingredients

Substance or Mixture:

Mixture

Declaration of hazardous chemical:

Hazard component CAS-No.	Content	GHS Classification
Oxydiethylene dibenzoate	1- 10 %	Acute toxicity 5; Oral
120-55-8		H303
		Acute hazards to the aquatic environment 2
		H401
Oxydipropyl dibenzoate	1- 10 %	Acute toxicity 5; Oral
27138-31-4		H303
		Acute hazards to the aquatic environment 2
		H401
		Chronic hazards to the aquatic environment 3
	0.1 1.0	H412
Aziridine, homopolymer	0.1- 1 %	Acute toxicity 4; Oral H302
9002-98-6		
		Serious eye damage/eye irritation 2A H319
		Skin sensitizer 1
		H317
		Acute hazards to the aquatic environment 2
		H401
		Chronic hazards to the aquatic environment 2
		H411
bronopol	< 0.1 %	Acute toxicity 3; Oral
52-51-7		H301
		Acute toxicity 4; Dermal
		H312
		Skin corrosion/irritation 2
		H315
		Serious eye damage/eye irritation 1
		H318
		Specific target organ toxicity - single exposure 3
		H335
		Acute hazards to the aquatic environment 1 H400
		Chronic hazards to the aquatic environment 2
		H411
		H411

Section 4. First aid measures

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

Section 5. Fire fighting measures

Suitable extinguishing media:

All common extinguishing agents are suitable.

Improper extinguishing media:

High pressure waterjet

Specific hazards arising from the chemical:

In case of fire toxic gases can be released.

Special protection equipment and precautions for firefighters:

Wear self-contained breathing apparatus.

Wear protective equipment.

Section 6. Accidental release measures

Personal precautions:

Wear protective equipment. Danger of slipping on spilled product. See advice in section 8

Environmental precautions:

Do not empty into drains / surface water / ground water.

Clean-up methods:

Remove with liquid-absorbing material (sand, peat, sawdust). Dispose of contaminated material as waste according to Section 13.

Section 7. Handling and storage

Handling:

Ensure good ventilation/suction at the workplace.

Avoid skin and eye contact.

Storage:

Ensure good ventilation/extraction.

Protect against contamination.

Frost-sensitive

Keep container tightly sealed and store in a frost free place.

Temperatures between + 15 °C and + 25 °C

Section 8. Exposure controls / personal protection

Components with specific control parameters for workplace:

Respiratory protection:

In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter (EN

This recommendation should be matched to local conditions.

Hand protection:

Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >=1 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >=1 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Protective goggles

Protective eye equipment should conform to EN166.

Body protection:

Wear protective equipment.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Engineering controls:

Ensure good ventilation/extraction.

General protection and hygiene measures:

Eyewash fountains and emergency showers are required.

Hygienic measures:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Section 9. Physical and chemical properties

Appearance: white

liquid, dispersion Odor: little intrinsic odour Odor threshold (CA): No data available. pH:(Concentration: 100 % product) 7.0 - 10.0

Melting point / freezing point: No data available. Specific gravity: No data available. **Boiling point:** 100 °C (212 °F)

Flash point: No flash point up to 100°C. Aqueous preparation.

Evaporation rate: No data available. Flammability (solid, gas): No data available. Lower explosive limit: No data available. **Upper explosive limit:** No data available. Vapor pressure: No data available. Vapor density: No data available. Density: 1.07 g/cm3

Solubility: fully miscible (20 °C)

Partition coefficient: n-

octanol/water:

No data available.

Auto ignition: No data available **Decomposition temperature:** No data available. Viscosity: 5,500 - 8,500 mPa.s

(Brookfield; Instrument: RVT; 23 °C (73.4 °F); speed of rotation: 20 min-1; Spindle No: 4; Conc.: 100 % product; Method: ;; NFT76-102; CP05; T31; viscosity, Brookfield)

VOC content: No data available.

Section 10. Stability and reactivity

Reactivity/Incompatible materials:

None if used for intended purpose.

Chemical stability:

Stable under recommended storage conditions.

Conditions to avoid:

None if used for intended purpose.

Hazardous decomposition products:

At higher temperatures acetic acid may be released.

Section 11. Toxicological information

Oral toxicity: Acute toxicity estimate (ATE) : > 5,000 mg/kg

Method: Calculation method

Symptoms of Overexposure: None known.

Acute oral toxicity:

Oxydiethylene dibenzoate	Value type	LD50
120-55-8	Value	4,190 mg/kg
	Species	rat
	Method	OECD Guideline 401 (Acute Oral Toxicity)
Oxydipropyl dibenzoate	Value type	LD50
27138-31-4	Value	3,914 mg/kg
	Species	rat
	Method	OECD Guideline 401 (Acute Oral Toxicity)
Aziridine, homopolymer	Value type	Acute toxicity estimate (ATE)
9002-98-6	Value	500 mg/kg
	Species	
	Method	Expert judgement
Aziridine, homopolymer	Value type	LD50
9002-98-6	Value	500 - 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 423 (Acute Oral toxicity)
bronopol	Value type	LD50
52-51-7	Value	193 - 211 mg/kg
	Species	rat
	Method	not specified
bronopol	Value type	Acute toxicity estimate (ATE)
52-51-7	Value	193 mg/kg
	Species	
	Method	Expert judgement

Acute inhalative toxicity:

Oxydiethylene dibenzoate	Value type	LC50
120-55-8	Value	> 200 mg/l
	Exposure time	4 h
	Species	rat
	Method	not specified
Oxydipropyl dibenzoate	Value type	LC50
27138-31-4	Value	> 200 mg/l
	Exposure time	4 h
	Species	rat
	Method	not specified

Acute dermal toxicity:

Oxydiethylene dibenzoate	Value type	LD50
120-55-8	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
Oxydipropyl dibenzoate	Value type	LD50
27138-31-4	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
bronopol	Value type	LD50
52-51-7	Value	1,600 mg/kg
	Species	rat
	Method	not specified

Skin corrosion/irritation:

Oxydiethylene dibenzoate	Result	not irritating
120-55-8	Exposure time	4 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Oxydipropyl dibenzoate	Result	not irritating
27138-31-4	Exposure time	4 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Aziridine, homopolymer	Result	not irritating
9002-98-6	Exposure time	
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
bronopol	Result	irritating
52-51-7	Exposure time	4 h
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Oxydiethylene dibenzoate	Result	slightly irritating
120-55-8	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Oxydipropyl dibenzoate	Result	not irritating
27138-31-4	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Aziridine, homopolymer	Result	not irritating
9002-98-6	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
bronopol	Result	highly irritating
52-51-7	Exposure time	
	Species	rabbit
	Method	Draize Test

Respiratory or skin sensitization:

Oxydiethylene dibenzoate	Result	not sensitising	
120-55-8	Test type		
	Species	guinea pig	
	Method	OECD Guideline 406 (Skin Sensitisation)	
Oxydipropyl dibenzoate	Result	not sensitising	
27138-31-4	Test type	Guinea pig maximisation test	
	Species	guinea pig	
	Method	OECD Guideline 406 (Skin Sensitisation)	
Aziridine, homopolymer	Result	sensitising	
9002-98-6	Test type	Guinea pig maximisation test	
	Species	guinea pig	
	Method	OECD Guideline 406 (Skin Sensitisation)	
bronopol	Result	not sensitising	
52-51-7	Test type	Guinea pig maximisation test	
	Species	guinea pig	
	Method	OECD Guideline 406 (Skin Sensitisation)	

Germ cell mutagenicity:

Oxydiethylene dibenzoate	Result	negative
120-55-8	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Oxydiethylene dibenzoate	Result	negative
120-55-8	Type of study / Route of administration	mammalian cell gene mutation assay
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 476 (In vitro Mammalian Cell Gene
		Mutation Test)
Oxydiethylene dibenzoate	Result	negative
120-55-8	Type of study / Route of administration	in vitro mammalian chromosome aberration test
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Oxydipropyl dibenzoate	Result	negative
27138-31-4	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Oxydipropyl dibenzoate	Result	negative
27138-31-4	Type of study / Route of administration	in vitro mammalian chromosome aberration test
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Oxydipropyl dibenzoate	Result	negative
27138-31-4	Type of study / Route of administration	mammalian cell gene mutation assay
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 476 (In vitro Mammalian Cell Gene
		Mutation Test)
bronopol	Result	negative
52-51-7	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	not specified
bronopol	Result	positive
52-51-7	Type of study / Route of administration	in vitro mammalian chromosome aberration test
	Metabolic activation / Exposure time	with and without
	Method	not specified
bronopol	Result	negative
52-51-7	Type of study / Route of administration	mammalian cell gene mutation assay
	Metabolic activation / Exposure time	with and without
	Method	not specified
bronopol	Result	negative
52-51-7	Type of study / Route of administration	oral: gavage
	Metabolic activation / Exposure time	
	Species	mouse
	Method	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
bronopol	Result	negative
52-51-7	Type of study / Route of administration	oral: gavage
	Metabolic activation / Exposure time	
	Species	rat
	Method	OECD Guideline 486 (Unscheduled DNA Synthesis
		(UDS) Test with Mammalian Liver Cells in vivo)

Repeated dose toxicity:

Oxydiethylene dibenzoate	Result	NOAEL=> 1,000 mg/kg
120-55-8	Route of application	oral: feed
	Exposure time / Frequency of treatment	90 daysdaily
	Species	rat
	Method	OECD Guideline 408 (Repeated Dose 90-Day Oral
		Toxicity in Rodents)
Oxydipropyl dibenzoate	Result	NOAEL=1,000 mg/kg
27138-31-4	Route of application	oral: feed
	Exposure time / Frequency of treatment	13 wdaily
	Species	rat
	Method	OECD Guideline 408 (Repeated Dose 90-Day Oral
		Toxicity in Rodents)
bronopol	Result	NOAEL=7 mg/kg
52-51-7	Route of application	oral: drinking water
	Exposure time / Frequency of treatment	104 wdaily
	Species	rat
	Method	not specified
bronopol	Result	LOAEL=20 mg/kg
52-51-7	Route of application	oral: gavage
	Exposure time / Frequency of treatment	13 wdaily
	Species	rat
	Method	not specified

Section 12. Ecological information

General ecological information: Do not empty into drains, soil or bodies of water.

Ecotoxicity: Harmful to aquatic life.

Toxicity:

Oxydiethylene dibenzoate	Value type	L.C50
120-55-8	Value	2.9 mg/l
120 33 0	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Oncorhynchus mykiss
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Oxydiethylene dibenzoate	Value type	EC50
120-55-8	Value	26 mg/l
120 33 0	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Oxydiethylene dibenzoate	Value type	EC50
120-55-8	Value	15 mg/l
120-33-6	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Overdiethylana dibangaata		EC10
Oxydiethylene dibenzoate 120-55-8	Value type Value	> 100 mg/l
120-33-8	Acute Toxicity Study	Bacteria
	, ,	3 h
	Exposure time	3 11
	Species Method	OECD Cuideline 200 (Activated Cludes Description Inhibition Test)
0 1 1 1 1		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) LC50
Oxydipropyl dibenzoate 27138-31-4	Value type Value	
2/138-31-4		3.7 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Pimephales promelas
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Oxydipropyl dibenzoate	Value type	EL50
27138-31-4	Value	19.3 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Oxydipropyl dibenzoate	Value type	EL50
27138-31-4	Value	4.9 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	EL10
	Value	0.89 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Oxydipropyl dibenzoate	Value type	EC50
27138-31-4	Value	> 100 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	3 h
	Species	activated sludge of a predominantly domestic sewage
	Method	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Aziridine, homopolymer	Value type	LC50
9002-98-6	Value	> 1 - 10 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Leuciscus idus
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Aziridine, homopolymer	Value type	EC10
9002-98-6	Value	0.2 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	17 h
	Species	
1 1	Method	not specified
bronopol 52.51.7	Value type	LC50
52-51-7	Value	41 mg/l
	Acute Toxicity Study	Fish 96 h
	Exposure time Species	Oncorhynchus mykiss
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
	Value type	NOEC
	Value	21.5 mg/l
	Acute Toxicity Study	Fish
	Exposure time	30 d
	Species	Oncorhynchus mykiss
	Method	OECD Guideline 210 (fish early lite stage toxicity test)
bronopol	Value type	EC50
52-51-7	Value	1.4 mg/l
02 01 .	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
bronopol	Value type	EC50
52-51-7	Value	0.37 mg/l
•	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	0.1 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchneriella subcapitata
		OECD Guideline 201 (Alga, Growth Inhibition Test)
	Method	OECE Galdeline 201 (11gu, Glowal Infile and 1 cst)
bronopol	Method Value type	EC50
bronopol 52-51-7	•	
	Value type	EC50
	Value type Value	EC50 43 mg/l
	Value type Value Acute Toxicity Study	EC50 43 mg/l Bacteria

Persistence and degradability:

Oxydiethylene dibenzoate	Result	readily biodegradable
120-55-8	Route of application	aerobic

	Degradability	83 %	
	Method	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	
Oxydipropyl dibenzoate	Result	readily biodegradable	
27138-31-4	Route of application	aerobic	
	Degradability	85 %	
	Method	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	
Aziridine, homopolymer	Result	not inherently biodegradable	
9002-98-6	Route of application	aerobic	
	Degradability	20 - 70 %	
	Method	OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA	
		Test)	
bronopol	Result	readily biodegradable	
52-51-7	Route of application	aerobic	
	Degradability	> 70 - 80 %	
	Method	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)	
	Result	not inherently biodegradable	
	Route of application	no data	
	Degradability	50 %	
	Method	OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test)	

Bioaccumulative potential / Mobility in soil:

Oxydiethylene dibenzoate	LogPow	2.3
120-55-8	Temperature	
	Method	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
		Method)
Oxydipropyl dibenzoate	LogPow	3.9
27138-31-4	Temperature	20 °C
	Method	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
		Method)
bronopol	LogPow	0.22
52-51-7	Temperature	24 °C
	Method	EU Method A.8 (Partition Coefficient)

Section 13. Disposal considerations

Product

Method of disposal:

In consultation with the responsible local authority, must be subjected to special treatment.

Packaging

Disposal of uncleaned packages:

Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Section 14. Transport information

Road transport ADR:

Not dangerous goods

Railroad transport RID:

Not dangerous goods

Inland water transport ADN:

Not dangerous goods

Marine transport IMDG:

Not dangerous goods

Air transport IATA:

Not dangerous goods

Section 15. Regulatory information

Regulatory Information:

Ministry of Industry Notice. The system to classify and communicate the hazard of hazardous material, BE. 2555

Global inventory status:

Regulatory list	Notification
TSCA	yes
DSL	yes
KECI (KR)	yes
ENCS (JP)	yes
IECSC	yes
AICS	yes
PICCS (PH)	yes
CH INV	yes
EINECS	yes

Section 16. Other information

Disclaimer:

This Safety Data Sheet has been generated based on Ministry of Industry Notice. The system to classify and communicate the hazard of hazardous material, BE. 2555 only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance. This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

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