

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 1 of 15

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Acetylation mixture OHZ acetic anhydride in 1,4-dioxane

UFI: 24W3-D3EN-M00G-Y9PP

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

Reagents and laboratory chemicals

Only for laboratory and analysis purposes.

**Uses advised against**

Do not use for private purposes (household).

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

Company name:	AnalytiChem GmbH	
	ACD	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
E-mail:	info@analytichem.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
E-mail:	produktsicherheit@analytichem.de	
Internet:	www.analytichem.de	
Responsible Department:	Abteilung Produktsicherheit	

**1.4. Emergency telephone number:**

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

**Further Information**

No data available

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Flam. Liq. 2; H225  
Carc. 1B; H350  
Acute Tox. 2; H330  
Skin Irrit. 2; H315  
Eye Dam. 1; H318  
STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard components for labelling**

1,4-dioxane  
acetic anhydride

**Signal word:** Danger

according to Regulation (EC) No 1907/2006

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 2 of 15

**Pictograms:****Hazard statements**

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.

**Precautionary statements**

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing and 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.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor.
P403+P235	Store in a well-ventilated place. Keep cool.

**Special labelling of certain mixtures**

Restricted to professional users.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Relevant ingredients**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
123-91-1	1,4-dioxane			75 - < 80 %
	204-661-8	603-024-00-5	01-2119462837-26	
	Flam. Liq. 2, Carc. 1B, Eye Irrit. 2, STOT SE 3; H225 H350 H319 H335 EUH019 EUH066			
108-24-7	acetic anhydride			20 - < 25 %
	203-564-8	607-008-00-9	01-2119486470-36	
	Flam. Liq. 3, Acute Tox. 2, Acute Tox. 4, Skin Corr. 1B, STOT SE 3; H226 H330 H302 H314 H335			

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

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 3 of 15

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

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
123-91-1	204-661-8	1,4-dioxane	75 - < 80 %
		oral: LD50 = ca. 5150 mg/kg	
108-24-7	203-564-8	acetic anhydride	20 - < 25 %
		inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); oral: LD50 = 630 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 5 - < 25 Eye Dam. 1; H318: >= 5 - < 25 Eye Irrit. 2; H319: >= 1 - < 5 STOT SE 3; H335: >= 5 - 100	

**Further Information**

No data available

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Self-protection of the first aider

**After inhalation**

Provide fresh air.

Call a physician immediately.

**After contact with skin**

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

**After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Remove contact lenses, if present and easy to do. Continue rinsing.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

Call a physician immediately.

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

Irritant

Cough

Dyspnoea

Dizziness

Gastrointestinal complaints

Headache

Vomiting

Repeated exposure may cause skin dryness or cracking.

Has degreasing effect on the skin.

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

No data available

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**Water spray jet, Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 4 of 15

**Unsuitable extinguishing media**

no restriction

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

Combustible liquid.

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>), Carbon monoxide

Beware of reignition.

**5.3. Advice for firefighters**

Remove persons to safety. Do not inhale explosion and combustion gases.

Avoid contact with skin, eyes and clothes.

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

Use water spray jet to protect personnel and to cool endangered containers.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Suppress gases/vapours/mists with water spray jet.

Move undamaged containers from immediate hazard area if it can be done safely.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Keep away from sources of ignition - No smoking.

This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).

Take action to prevent static discharges.

**For non-emergency personnel**

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

**For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment: see section 8

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Danger of explosion

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

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 5 of 15

**Other information**

- Provide adequate ventilation.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**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**

- Avoid exposure - obtain special instructions before use.
- Read label before use. Handle and open container with care.
- When using do not eat, drink, smoke, sniff. Keep container tightly closed.
- Use personal protection equipment. Use extractor hood (laboratory).
- Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.

**Advice on protection against fire and explosion**

- Take action to prevent static discharges. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Advice on general occupational hygiene**

- 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.
- The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

**Further information on handling**

- Take off immediately all contaminated clothing and wash it before reuse.
- If handled uncovered, arrangements with local exhaust ventilation have to be used.
- Draw up and observe skin protection programme.
- Wash hands and face before breaks and after work and take a shower if necessary.

**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.

**Hints on joint storage**

- Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.
- national regulations

**Further information on storage conditions**

- Vapours may form explosive mixtures with air.
- Keep container dry.
- Store in a place accessible by authorized persons only.
- Protect against: Air, Light

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

- Laboratory use Laboratory chemical

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 6 of 15

**Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
123-91-1	1,4-Dioxane, tech. grade	20	73		TWA (8 h)	
108-24-7	Acetic anhydride	1	2.5		TWA (8 h)	
		3	10		STEL (15 min)	

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
123-91-1	1,4-dioxane			
Worker DNEL, long-term	inhalation	systemic	73 mg/m <sup>3</sup>	
Worker DNEL, acute	inhalation	local	144 mg/m <sup>3</sup>	
Worker DNEL, long-term	dermal	systemic	21 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	systemic	18,25 mg/m <sup>3</sup>	
Consumer DNEL, acute	inhalation	local	72 mg/m <sup>3</sup>	
Consumer DNEL, long-term	dermal	systemic	12 mg/kg bw/day	
Consumer DNEL, long-term	oral	systemic	0,24 mg/kg bw/day	
108-24-7	acetic anhydride			
Worker DNEL, long-term	inhalation	systemic	4,2 mg/m <sup>3</sup>	
Worker DNEL, long-term	inhalation	local	4,2 mg/m <sup>3</sup>	
Worker DNEL, acute	inhalation	local	12,6 mg/m <sup>3</sup>	

**PNEC values**

CAS No	Substance	Value
	Environmental compartment	
123-91-1	1,4-dioxane	
Freshwater	10 mg/l	
Freshwater (intermittent releases)	10 mg/l	
Marine water	0,67 mg/l	
Freshwater sediment	37 mg/kg	
Micro-organisms in sewage treatment plants (STP)	2700 mg/l	
Soil	0,153 mg/kg	
108-24-7	acetic anhydride	
Freshwater	3,058 mg/l	
Freshwater (intermittent releases)	30,58 mg/l	
Marine water	0,306 mg/l	
Freshwater sediment	11,36 mg/kg	
Marine sediment	1,136 mg/kg	
Micro-organisms in sewage treatment plants (STP)	115 mg/l	
Soil	0,47 mg/kg	

**8.2. Exposure controls****Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 7 of 15

equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Suitable eye protection: goggles.

**Hand protection**

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 897 Butoject®

Suitable material: Butyl caoutchouc (butyl rubber) 0,3 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 897 Butoject®

Suitable material: Butyl caoutchouc (butyl rubber) 0,3 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>, <)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

**Skin protection**

Flame-retardant protective clothing. Wear anti-static footwear and clothing

**Respiratory protection**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Thermal hazards**

No data available

**Environmental exposure controls**

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Danger of explosion

**SECTION 9: Physical and chemical properties**

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

Physical state:	Liquid
Colour:	colourless
Odour:	No data available
Odour threshold:	No data available
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	<23 °C

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 8 of 15

Auto-ignition temperature:	No data available
Decomposition temperature:	not determined
pH-Value:	No data available
Viscosity / kinematic:	No data available
Water solubility:	No data available
Solubility in other solvents	
not determined	
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapour pressure:	No data available
(at 20 °C)	
Vapour pressure:	No data available
Density:	No data available
Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

**9.2. Other information**

**Information with regard to physical hazard classes**

**Explosive properties**

Vapours can form explosive mixtures with air.

**Sustained combustibility:**

No data available

**Self-ignition temperature**

Solid:

not applicable

Gas:

not applicable

**Oxidizing properties**

Not oxidising.

**Other safety characteristics**

**Evaporation rate:**

No data available

**Solvent separation test:**

No data available

**Solvent content:**

No data available

**Solid content:**

No data available

**Sublimation point:**

No data available

**Softening point:**

No data available

**Pour point:**

No data available

No data available:

**Viscosity / dynamic:**

No data available

**Flow time:**

No data available

**Further Information**

No data available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Highly flammable.

Vapours can form explosive mixtures with air.

**10.2. Chemical stability**

Protect against: Air, Light

**10.3. Possibility of hazardous reactions**



**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 9 of 15

Oxidising agent

Hydrogen

Acids

Nitric acid

**10.4. Conditions to avoid**

Air, Light

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

**10.5. Incompatible materials**

plastics

Copper

Copper alloys

**10.6. Hazardous decomposition products**

No data available

**Further information**

No data available

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Toxicokinetics, metabolism and distribution**

Avoid exposure - obtain special instructions before use.

**Acute toxicity**

Fatal if inhaled.

**ATEmix calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) 2,110 mg/l; ATE (inhalation dust/mist) 0,2110 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
123-91-1	1,4-dioxane				
	oral	LD50 ca. 5150 mg/kg	Rat	Study report (1973)	OECD Guideline 401
108-24-7	acetic anhydride				
	oral	LD50 630 mg/kg	Rat	Study report (1980)	5 animals per gender per group Starved f
	inhalation vapour	ATE 0,5 mg/l			
	inhalation dust/mist	ATE 0,05 mg/l			

**Irritation and corrosivity**

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye damage.

Inhalation effect: Damage to the respiratory tract.

Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

May cause cancer. (1,4-dioxane)

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

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 10 of 15

**STOT-single exposure**

May cause respiratory irritation. (1,4-dioxane; acetic anhydride)

**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.

**Information on likely routes of exposure**

No data available

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards****Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**Other information**

Pulmonary oedema

Liver and kidney damage

**Further information**

Irritant

Cough

Dyspnoea

Dizziness

Gastrointestinal complaints

Headache

Vomiting

Repeated exposure may cause skin dryness or cracking.

Has degreasing effect on the skin.

**SECTION 12: Ecological information****12.1. Toxicity**

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

**Acetylation mixture OHZ acetic anhydride in 1,4-dioxane**

Revision: 23.09.2025

Product code: 34991

Page 11 of 15

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
123-91-1	1,4-dioxane					
	Acute fish toxicity	LC50 6700 mg/l	96 h	Menidia beryllina	J. Hazard Mat. 1, 303-318. (1975)	Method by Dawson
	Acute algae toxicity	ErC50 > 1000 mg/l	72 h	Pseudokirchneriella subcapitata	Publication (1996)	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 1000 mg/l	48 h	Daphnia magna	Publication (2002)	OECD Guideline 202
	Fish toxicity	NOEC > 103 mg/l	32 d	Pimephales promelas	European Chemicals Bureau, Institute for	other: internal test method ET-15-1987-1
	Crustacea toxicity	NOEC 1000 mg/l	21 d	Daphnia magna	Publication (2002)	OECD Guideline 211
108-24-7	acetic anhydride					
	Acute fish toxicity	LC50 > 1000 mg/l	96 h	Oncorhynchus mykiss	Study report (2005)	other: SOP E257
	Acute algae toxicity	ErC50 > 1000 mg/l	72 h	Skeletonema costatum	Study report (2005)	ISO 10253
	Acute crustacea toxicity	EC50 > 1000 mg/l	48 h	Daphnia magna	Study report (1990)	OECD Guideline 202

**12.2. Persistence and degradability**

There are no data available on the mixture itself.

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
123-91-1	1,4-dioxane	-0,42
108-24-7	acetic anhydride	-0,577

**BCF**

CAS No	Chemical name	BCF	Species	Source
123-91-1	1,4-dioxane	0,3 - 0,7	Cyprinus carpio	EU Risk assessment r
108-24-7	acetic anhydride	3,16	fish	Environ. Toxicol. Ch

**12.4. Mobility in soil**

There are no data available on the mixture itself.

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

There are no data available on the mixture itself.

**Further information**

Avoid release to the environment.

Do not allow to enter into surface water or drains.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Acetylation mixture OHZ acetic anhydride in 1,4-dioxane

Revision: 23.09.2025

Product code: 34991

Page 12 of 15

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods****Disposal recommendations**

Send to a physico-chemical treatment facility under observation of official regulations.

Do not allow to enter into surface water or drains.

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

**Contaminated packaging**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

**Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 3286
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (1,4-dioxane, acetic anhydride)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3+6.1+8
Classification code:	FTC
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	368
Tunnel restriction code:	D/E

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 3286
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (1,4-dioxane, acetic anhydride)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3+6.1+8
Classification code:	FTC
Special Provisions:	274 802
Limited quantity:	1 L
Excepted quantity:	E2

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	UN 3286
<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (1,4-dioxane, acetic anhydride)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3+6.1/8
Special Provisions:	274
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-C

**Air transport (ICAO-TI/IATA-DGR)**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Acetylation mixture OHZ acetic anhydride in 1,4-dioxane

Revision: 23.09.2025

Product code: 34991

Page 13 of 15

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<b>14.2. UN proper shipping name:</b>	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (1,4-dioxane, acetic anhydride)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3+6.1 8
Limited quantity Passenger:	0.5 L
Passenger LQ:	Y340
Excepted quantity:	E2
IATA-packing instructions - Passenger:	352
IATA-max. quantity - Passenger:	1 L
IATA-packing instructions - Cargo:	363
IATA-max. quantity - Cargo:	5 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: Combustible liquid.

**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**

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):  
1,4-dioxane

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): H2 ACUTE TOXIC

Additional information:

P5c

**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.

Water hazard class (D):

3 - highly hazardous to water

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,7,8,9,10,11,12,14,15.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Acetylation mixture OHZ acetic anhydride in 1,4-dioxane

Revision: 23.09.2025

Product code: 34991

Page 14 of 15

## Abbreviations and acronyms

Flam. Liq. 2: Flammable liquids, hazard category 2  
Acute Tox. 2: Acute toxicity, hazard category 2  
Skin Corr. 1B: Skin corrosion, sub-category 1B  
Skin Irrit. 2: Skin irritation, hazard category 2  
Eye Dam. 1: Serious eye damage, hazard category 1  
Eye Irrit. 2: Eye irritation, hazard category 2  
Carc. 1B: Carcinogenicity, hazard category 1B  
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3  
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
Flam. Liq. 2; H225	On basis of test data
Carc. 1B; H350	Calculation method
Acute Tox. 2; H330	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
STOT SE 3; H335	Calculation method

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer.
EUH019	May form explosive peroxides.
EUH066	Repeated exposure may cause skin dryness or cracking.

## Further Information

Provide appropriate information, instructions and training to users

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Acetylation mixture OHZ acetic anhydride in 1,4-dioxane

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Page 15 of 15

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