

acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

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

1.1 Product identifier

Trade name Mischung 85 % Butylacetat / 15 % n-Butanol

Registration number (REACH)

Not relevant (mixture)

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

Relevant identified uses Industrial use

1.3 Details of the supplier of the safety data sheet

FRIEDRICH SCHARR KG Liebknechtstraße 50 70565 Stuttgart Germany

Telephone: +49 711 7868-0 Telefax: +49 711 7868-489 e-mail: info@scharr.de Website: www.scharr.de

e-mail (competent person) produktsicherheit@scharr.de (Produktsicherheit)

1.4 Emergency telephone number

Emergency information service +49 711 7868-237

This number is only available during the follow-

ing office hours: Mon-Fri 07:00 - 17:00

Poison	centre
1 013011	CCITCIC

Country	Name	Postal code/city	Telephone
Germany	Giftinformation Freiburg	79106 Freiburg im Bre- isgau	+49 (0)761 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Hazard class	Category	Hazard class and cat- egory	Hazard state- ment
flammable liquid	3	Flam. Liq. 3	H226
skin corrosion/irritation	2	Skin Irrit. 2	H315
serious eye damage/eye irritation	1	Eye Dam. 1	H318
specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Germany: en Page: 1 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word danger

- pictograms

GHS02, GHS05, GHS07



- hazard statements

H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H336 May cause drowsiness or dizziness.

- precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

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

tion/....

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.

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

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to industrial combustion plant.

- hazardous ingredients for labelling Butan-1-ol, n-butyl acetate

2.3 Other hazards

of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
n-butyl acetate	CAS No 123-86-4 EC No 204-658-1 REACH Reg. No	75 – < 90	Flam. Liq. 3 / H226 STOT SE 3 / H336	(3) (1)
	01-2119485493-29- xxxx			
Butan-1-ol	CAS No 71-36-3 EC No 200-751-6 REACH Reg. No	10-<25	Flam. Liq. 3 / H226 Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 STOT SE 3 / H335 STOT SE 3 / H336	1)
	01-2119484630-38- xxxx			

Germany: en Page: 2 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
Butan-1-ol	-	-	500 ^{mg} / _{kg}	oral

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Self-protection of the first aider.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Narcotic effects. Breathing difficulties. Headache. Vertigo.

4.3 Indication of any immediate medical attention and special treatment needed

Subsequent observance for pneumonia and pulmonary oedema. Supervise the blood circulation.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2), Sand

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Danger of bursting container.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Germany: en Page: 3 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Provision of sufficient ventilation.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

Germany: en Page: 4 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

- flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- specific designs for storage rooms or vessels
- Lagerklasse (storage class according to TRGS 510, 3 (flammable and desensitizing explosive liquids) Germany)
- packaging compatibilities
 Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Coun- try	Name of sub- stance	CAS No	Identifi- er	TWA [ppm]	TWA [mg/ m³]	STEL [ppm]	STEL [mg/ m³]	Source
AT	n-butyl acetate	123-86-4	MAK	100	480			GKV
AT	Butan-1-ol	71-36-3	MAK	50	150	200	600	GKV
СН	n-butyl acetate	123-86-4	MAK	100	480	200	960	SUVA
СН	Butan-1-ol	71-36-3	MAK	100	310	100	310	SUVA
DE	n-butyl acetate	123-86-4	MAK	100	480	200	960	DFG
DE	n-butyl acetate	123-86-4	AGW	62	300	124	600	TRGS 900
DE	Butan-1-ol	71-36-3	AGW	100	310	100	310	TRGS 900
EU	n-butyl acetate	123-86-4	IOELV	50	241	150	723	2019/1831/EU

Notation

TWA

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Biological limit values

3						
Coun- try	Name of agent	Parameter	Nota- tion	Identifier	Value	Source
CH	n-butanol	n-butanol	crea	BAT	2 mg/g	SUVA
СН	n-butanol	n-butanol	crea	BAT	10 mg/g	SUVA

Germany: en Page: 5 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Biological limit values

Coun- try	Name of agent	Parameter	Nota- tion	Identifier	Value	Source
DE	1-butanol	1-butanol	crea	BLV	2 mg/g	TRGS 903
DE	1-butanol	1-butanol	hydr, crea	BLV	10 mg/g	TRGS 903

Notation

crea creatinine hydr hydrolysis

Relevant DNELs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
n-butyl acetate	123-86-4	DNEL	600 mg/m ³	human, inhalat- ory	worker (industry)	acute - local ef- fects
n-butyl acetate	123-86-4	DNEL	600 mg/m ³	human, inhalat- ory	worker (industry)	acute - systemic effects
n-butyl acetate	123-86-4	DNEL	300 mg/m ³	human, inhalat- ory	worker (industry)	chronic - local ef- fects
n-butyl acetate	123-86-4	DNEL	300 mg/m ³	human, inhalat- ory	worker (industry)	chronic - systemic effects
Butan-1-ol	71-36-3	DNEL	310 mg/m ³	human, inhalat- ory	worker (industry)	chronic - local ef- fects

Relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time
n-butyl acetate	123-86-4	PNEC	0,18 ^{mg} / _l	aquatic organ- isms	freshwater	short-term (single instance)
n-butyl acetate	123-86-4	PNEC		aquatic organ- isms	freshwater	short-term (single instance)
n-butyl acetate	123-86-4	PNEC	0,018 ^{mg} / _l	aquatic organ- isms	marine water	short-term (single instance)
n-butyl acetate	123-86-4	PNEC	35,6 ^{mg} / _l	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
n-butyl acetate	123-86-4	PNEC	0,981 ^{mg} /	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
n-butyl acetate	123-86-4	PNEC	0,0981 ^{mg} / kg	aquatic organ- isms	marine sediment	short-term (single instance)
n-butyl acetate	123-86-4	PNEC	0,0903 ^{mg} / kg	terrestrial organ- isms	soil	short-term (single instance)
n-butyl acetate	123-86-4	PNEC	0,36 ^{mg} / _l	aquatic organ- isms	water	intermittent re- lease
Butan-1-ol	71-36-3	PNEC	2,25 ^{mg} / _l	aquatic organ- isms	water	intermittent re- lease

Germany: en Page: 6 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environmental compartment	Exposure time
Butan-1-ol	71-36-3	PNEC	0,082 ^{mg} / _l	aquatic organ- isms	freshwater	short-term (single instance)
Butan-1-ol	71-36-3	PNEC	0,008 ^{mg} / _l	aquatic organ- isms	marine water	short-term (single instance)
Butan-1-ol	71-36-3	PNEC	2.476 ^{mg} / _l	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
Butan-1-ol	71-36-3	PNEC	0,324 ^{mg} / kg	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
Butan-1-ol	71-36-3	PNEC	0,032 ^{mg} / kg	aquatic organ- isms	marine sediment	short-term (single instance)
Butan-1-ol	71-36-3	PNEC	0,017 ^{mg} / kg	terrestrial organ- isms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

- type of material

IIR: isobutene-isoprene (butyl) rubber

- material thickness

0,3 mm

- breakthrough times of the glove material
 - >30 minutes (permeation: level 2)
- protective gloves splash protection

Type of material IIR: isobutene-isoprene (butyl) rubber

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

Germany: en Page: 7 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	characteristic
Melting point/freezing point	<-90 °C
Boiling point or initial boiling point and boiling range	119 °C at 1.013 hPa
Evaporation rate	not determined
Flammability	flammable liquid in accordance with GHS criteria
Lower and upper explosion limit	1,4 vol% - 11,3 vol%
Flash point	25 °C
Auto-ignition temperature	355 °C
pH (value)	not determined
Solubility(ies)	not determined

Partition coefficient

Vapour pressure

this information is not available

10,15 hPa at 18,49 °C

Density and/or relative density

Density	0,843 ^g / _{cm³} at 20 °C
---------	--

Particle characteristics no	not relevant (liquid)
-----------------------------	-----------------------

9.2 Other information

Information with regard to physical hazard classes	there is no additional information
--	------------------------------------

Germany: en Page: 8 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Other safety characteristics

Solid content	0 %
Temperature class (EU, acc. to ATEX)	T2 (maximum permissible surface temperature on the equipment: 300°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Butan-1-ol	71-36-3	oral	500 ^{mg} / _{kg}

Germany: en Page: 9 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
n-butyl acetate	123-86-4	oral	LD50	10.760 ^{mg} / _{kg}	rat
n-butyl acetate	123-86-4	dermal	LD50	>14.112 ^{mg} / _{kg}	rabbit
Butan-1-ol	71-36-3	inhalation: va- pour	LC50	17.760 ^{mg} / _{m³} / 4h	rat
Butan-1-ol	71-36-3	oral	LD50	2.292 ^{mg} / _{kg}	rat
Butan-1-ol	71-36-3	dermal	LD50	3.430 ^{mg} / _{kg}	rabbit

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment. Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV): WGK 1, slightly hazardous to water (Germany)

Germany: en Page: 10 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
n-butyl acetate	123-86-4	LC50	18 ^{mg} / _l	fish	96 h
n-butyl acetate	123-86-4	EC50	18 ^{mg} / _l	fish	96 h
n-butyl acetate	123-86-4	ErC50	335 ^{mg} / _l	algae	24 h
Butan-1-ol	71-36-3	LC50	1.376 ^{mg} / _l	fish	96 h
Butan-1-ol	71-36-3	EC50	1.328 ^{mg} / _l	aquatic invertebrates	48 h
Butan-1-ol	71-36-3	ErC50	225 ^{mg} / _l	algae	96 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
n-butyl acetate	123-86-4	EC50	34,2 ^{mg} / _l	aquatic invertebrates	21 d
n-butyl acetate	123-86-4	LC50	43,5 ^{mg} / _l	aquatic invertebrates	21 d
Butan-1-ol	71-36-3	EC50	18 ^{mg} / _l	aquatic invertebrates	21 d

Biodegradation

Data are not available.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

Germany: en Page: 11 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

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

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN 1993
IMDG-Code	UN 1993
ICAO-TI	UN 1993

14.2 UN proper shipping name

ADR/RID/ADN	FLAMMABLE LIQUID, N.O.S.
IMDG-Code	FLAMMABLE LIQUID, N.O.S.
ICAO-TI	Flammable liquid, n.o.s.
Technical name (Hazardous ingredients)	n-butyl acetate, Butan-1-ol

14.3 Transport hazard class(es)

ADR/RID/ADN	3
IMDG-Code	3
ICAO-TI	3

14.4 Packing group

ADR/RID/ADN	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards non-environmentally hazardous acc. to the dan-

gerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Germany: en Page: 12 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - additional information

Classification code	F1
Danger label(s)	3



Special provisions (SP) 274, 601

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 L
Transport category (TC) 3
Tunnel restriction code (TRC) D/E
Hazard identification No 30

International Maritime Dangerous Goods Code (IMDG) - additional information

Marine pollutant Danger label(s) 3



Special provisions (SP) 223, 274, 955

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 L
EmS F-E, <u>S-E</u>
Stowage category A

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

Danger label(s) 3



Special provisions (SP)

Excepted quantities (EQ)

Limited quantities (LQ)

A3

E1

Limited quantities (LQ)

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

Germany: en Page: 13 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Seveso Directive

2012/18/EU (Seveso III)

No	Dangerous substance/hazard categories	Qualifying quantity (plication of lower and mer	l upper-tier require-	Notes
P5c	flammable liquids (cat. 2, 3)	5.000	50.000	51)

Notation

VOC Deco-Paint Directive 2004/42/EC

VOC content 10	100 %
----------------	-------

Industrial Emissions Directive (IED)

VOC content	100 %
-------------	-------

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Water Framework Directive (WFD)

none of the ingredients are listed

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National regulations (Austria)

Ordinance on combustible liquids (VbF)

- VbF (group and hazard class)

AII (combustible liquids of group A, hazard class II)

National regulations (Germany)

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)

Wassergefährdungsklasse, WGK (water hazard class)

1 slightly hazardous to water

Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass concen- tration	Notation
5.2.5	organic substances		≥ 25 wt%	0,5 ^{kg} / _h	50 ^{mg} / _{m³}	3)

Notation

National regulations Switzerland

Germany: en Page: 14 / 18

⁵¹⁾ flammable liquids, categories 2 or 3 not covered by P5a and P5b

a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Ordinance on the incentive tax on volatile organic compounds (VOCV)

VOC content (object of taxation): 100 %

National inventories

Country	Inventory	Status
AU	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	all ingredients are listed
JP	ISHA-ENCS	all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed

Legend

Australian Inventory of Chemical Substances
Chemical Inventory and Control Regulation
List of Existing and New Chemical Substances (CSCL-ENCS)
Domestic Substances List (DSL)
EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China AICS CICR CSCL-ENCS DSL

ECSI IECSC

INSQ ISHA-ENCS

National Inventory of Chemical Substances
Inventory of Existing and New Chemical Substances (ISHA-ENCS)
Korea Existing Chemicals Inventory

KECI NZIoC

New Zealand Inventory of Chemicals
Philippine Inventory of Chemicals and Chemical Substances (PICCS) **PICCS**

REACH Reg. REACH registered substances TCSI Taiwan Chemical Substance Inventory

TSCA **Toxic Substance Control Act**

15.2 **Chemical Safety Assessment**

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

Name of substance	Name acc. to inventory	CAS No	Type of registra- tion
n-butyl acetate	n-butyl acetate	123-86-4	
Butan-1-ol	butan-1-ol	71-36-3	

Germany: en Page: 15 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
8.2	Type of material: PVC: polyvinyl chloride, IIR: isobutene-isoprene (butyl) rubber	Type of material: IIR: isobutene-isoprene (butyl) rubber
8.2	Material thickness: IIR 0,3 mm; PVC 0,9 mm	Material thickness: 0,3 mm
8.2	Type of material: PVC: polyvinyl chloride IIR: isobutene-isoprene (butyl) rubber	Type of material: IIR: isobutene-isoprene (butyl) rubber
11.1		Acute toxicity of components of the mixture: change in the listing (table)
12.6	Endocrine disrupting properties: Information on this property is not available.	Endocrine disrupting properties: None of the ingredients are listed.

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2019/1831/EU	Commission Directive establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de naviga- tion intérieures (European Agreement concerning the International Carriage of Dangerous Goods by In- land Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ADR/RID/ADN	Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)
AGW	Workplace exposure limit
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DFG	Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule

Germany: en Page: 16 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Abbr.	Descriptions of used abbreviations	
ErC50	■ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control	
Eye Dam.	Seriously damaging to the eye	
Eye Irrit.	Irritant to the eye	
Flam. Liq.	Flammable liquid	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations	
GKV	Grenzwerteverordnung	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
ICAO	International Civil Aviation Organization	
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air	
IMDG	International Maritime Dangerous Goods Code	
IMDG-Code	International Maritime Dangerous Goods Code	
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008	
IOELV	Indicative occupational exposure limit value	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval	
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
ppm	Parts per million	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)	
Skin Corr.	Corrosive to skin	
Skin Irrit.	Irritant to skin	
STEL	Short-term exposure limit	
STOT SE	Specific target organ toxicity - single exposure	
SUVA	Grenzwerte am Arbeitsplatz, Suva	
SVHC	Substance of Very High Concern	
TRGS	Technische Regeln für GefahrStoffe (technical rules for hazardous substances, Germany)	
TRGS 900	Arbeitsplatzgrenzwerte (TRGS 900)	
TRGS 903	Biologische Grenzwerte (TRGS 903)	
TWA	Time-weighted average	
Ĺ	I .	

Germany: en Page: 17 / 18



acc. to Regulation (EC) No. 1907/2006 (REACH)

Mischung 85 % Butylacetat / 15 % n-Butanol

Version number: 2.0 Revision: 10.08.2021 Replaces version of: 21.05.2021 (1)

Abbr.	Descriptions of used abbreviations
VbF	Ordinance on combustible liquids (Austria)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Germany: en Page: 18 / 18