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Pages 01 – 11 SDS for Silver Conductive Paint

Pages 12 – 21 SDS for Solvent

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

1.1. Product identifier: 5900 Silver Conductive Paint

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

Use of the substance/mixture:

Metallisation

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

Busch GmbH & Co. KG Heidelberger Straße 26 D-68519 Viernheim

Telephone: +49 (0) 6204 – 6007 10 Telefax: +49 (0) 6204 – 6007 19 Homepage: www.busch-model.com E-Mail: info@busch-model.com

## 1.4. Emergency telephone number:

+49 (0) 228 – 19240 (Emergency poison number)

# 2 Hazards identification

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

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

Flammable liquid: Flam. Liq. 3

Specific target organ toxicity - single exposure: STOT SE 3 Hazardous to the aquatic environment: Aquatic Acute 1 Hazardous to the aquatic environment: Aquatic Chronic 1 Hazard Statements: Flammable liquid and vapour.

May cause drowsiness or dizziness.

Very toxic to aquatic life with long lasting effects.

### 2.2. Label elements

## Hazardous components which must be listed on the label

n-Butyl acetate

Signal word: Warning

Pictograms: GHS02-GHS07-GHS09







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#### **Hazard statements**

H226 Flammable liquid and vapour.H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

# **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P273 Avoid release to the environment.

**2.3. Other hazards:** No data available

# 3 Composition/information on ingredients

### 3.2. Mixtures

Chemical characterization: Silver pigmented conductive lacquer

# **Hazardous components**

Chemical name: Silver powder

EC-No. / CAS-No. 231-131-3 / 7440-22-4

CLP classification: Aquatic Acute 1 (M-Factor = 1000), Aquatic Chronic 1;

H400 H410

Reach-No. 01-2119555669-21

Quantity:  $40 - \hat{A}45\%$ 

Chemical name: n-Butyl acetate

EC-No. / CAS-No. 204-658-1 / 123-86-4

Index-No. 607-025-00-1

CLP classification: Flam. Liq. 3, STOT SE 3; H226 H336 EUH066

Quantity: < 25%

Chemical name: Xylene

EC-No. / CAS-No. 215-535-7 / 1330-20-7

Index-No. 601-022-00-9

CLP classification: Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2;

H226 H332 H312 H315

Quantity: 1 - < 5%

Full text of H- and EUH-phrases: see section 16.

### 4 First aid measures

# **4.1. Description of first aid measures**

General information: Remove contaminated soaked clothing immediately.

Take away from danger area and lay down affected person.

After inhalation: Move to fresh air in case of accidental inhalation of vapours.

In the event of symptoms refer for medical treatment.

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After contact with skin: Wash off with soap and plenty of water.

Treat subsequently with skin cream.

Consult a doctor if skin irritation persists.

After contact with eyes: Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Seek medical treatment by eye specialist.

After ingestion: Do not induce vomiting.

Summon a doctor immediately.

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

No data available.

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

Treat symptoms.

# 5 Firefighting measures

## 5.1. Extinguishing media

Suitable extinguishing media:

Alcohol-resistant foam, dry chemical, carbon dioxide (CO2),

water-spray.

Unsuitable extinguishing media:

Full water jet.

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

Fire gas of organic material has to be classed invariably as

respiratory poison.

**5.3.** Advice for firefighters: Use breathing apparatus with independent air supply.

Protective suit.

Additional information: Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## 6 Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures:

In case of vapour formation use respirator.

Ensure adequate ventilation. Use personal protective clothing. Keep away sources of ignition.

# **6.2. Environmental precautions:**

Do not discharge into the drains/surface waters/ground water.

Do not discharge into the subsoil/soil.

# 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid

binder, universal binder).

Shovel into suitable container for disposal.





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#### **6.4.** Reference to other sections:

Observe protective instructions (see Sections 7 and 8). Information for disposal see section 13.

# 7 Handling and storage

## 7.1. Precautions for safe handling

Advice on safe handling: Ensure adequate ventilation.

Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion:

Keep away from sources of ignition - No smoking. Do not spray on a naked flame or any other incandescent

material.

# 7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Keep containers tightly closed in a cool, well-ventilated place.

Advice on storage compatibility:

Incompatible with:

Alkaline metals and earth alkaline metals.

Strong oxidizing agents

Further information on storage conditions:

Keep away from food, drink and animal feeding stuffs.

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

# 8 Exposure controls/personal protection

## 8.1. Control parameters

## Exposure limits (EH40)

Enposere minus (Errio)						
CAS-No.	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7440-22-4	Silver, metallic	-	0,1		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
1330-20-7	Xylene; mixed	50	220		TWA (8 h)	WEL
	isomers	100	441		STEL (15 min)	WEL
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL

## Biological Monitoring Guidance Values (EH40)

Biological Womening Galdanies Values (E1170)							
CAS-No.	Substance Parameter Value		Test	Sampling			
				material	time		
1330-20-7	Xylene, o-, m-, p- or	Methyl hippuric	650	urine	Post shift		
	mixed isomers	acid	mmol/mol				

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# **8.2.** Exposure controls

Protective and hygiene measures:

Do not inhale vapours.

Wash hands before breaks and immediately after handling the

product.

When using, do not eat, drink or smoke. Avoid contact with eyes, skin or oral tissues.

Remove and wash contaminated clothing before re-use.

Eye/face protection: Safety goggles with side protection (EN 166).

Hand protection: Splash protection:

Protective gloves resistant to chemicals made off nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 30 minutes, i.e. protective glove < Camatril

Velours 730> made by www.kcl.de.

This recommendation refers exclusively to the chemical

compatibility and the lab test conforming to EN 374 carried out

under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations

given by the manufacturer of protective gloves.

Skin protection: Long sleeved clothing (EN 368).

Respiratory protection: In case of insufficient ventilation wear suitable respiratory

equipment (gas filter type A) (EN 14387).

# 9 Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: Silver-grey
Odour: characteristic
Flash point: 27 - 40 °C

Lower explosion limits: n.d.

Upper explosion limits:

Vapour pressure: n.d.

Density (at 20 °C): approx. 1,4 g/cm<sup>3</sup> Water solubility: Partially soluble

(at 20 °C)

Ignition temperature: > 300 °C

Explosive properties: The product is considered non-explosive; nevertheless explosive

vapour/air mixture can be generated.

**9.2. Other information:** No data available.

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# 10 Stability and reactivity

**10.1. Reactivity:** No decomposition if stored and applied as directed.

**10.2. Chemical stability:** Stable under normal conditions.

10.3. Possibility of hazardous reactions:

No hazardous reactions known.

**10.4. Conditions to avoid:** To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials:

Strong oxidizing agents

10.6. Hazardous decomposition products:

Carbon monoxide and carbon dioxide.

# 11 Toxicological information

## 11.1. Information on toxicological effects

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

Acute toxicity

CAS-No. / Chemical name

123-86-4 / n-Butyl acetate

Exposure routes	Method	Dose	Species
oral	LD50 mg/kg	10800	Rat
dermal	LD50 mg/kg	Ã17600	Rabbit

# CAS-No. / Chemical name

1330-20-7 / Xylene

Exposure routes	Method	Dose	Species
dermal	ATE	1100 mg/kg	
inhalative vapour	ATE	11 mg/l	
inhalative aerosol	ATE	1,5 mg/l	

Irritation and corrosivity: Based on available data, the classification criteria are not met.

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

STOT-single exposure: Vapours may cause drowsiness and dizziness. (n-Butyl acetate)

Severe effects after repeated or prolonged exposure:

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

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Carcinogenic/mutagenic/toxic effects for reproduction:

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

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

## **Practical experience**

Observations relevant to classification:

Vapours may cause drowsiness and dizziness.

Repeated exposure may cause skin dryness or cracking.

Further information: The product was classified on the basis of the calculation

procedure of the preparation directive (1999/45/EC).

# 12 Ecological information

**12.1. Toxicity:** No data available.

# CAS-No. / Chemical name

7440-22-4 / Silver powder

Aquatic toxicity	Method	Dose	[h] [d]	Species
Acute fish toxicity	LC50	0,003 mg/l	96 h	Oncorhynchus mykiss
Acute crustacean toxicity	EC50	0,00022 mg/l	48 h	Daphnia magna

## CAS-No. / Chemical name

123-86-4 / n-Butyl acetate

Aquatic toxicity	Method	Dose	[h] [d]	Species
Acute fish toxicity	LC50	$\tilde{A}10$ mg/l	96 h	

# 12.2. Persistence and degradability:

No data available.

# 12.3. Bioaccumulative potential:

No data available.

**12.4. Mobility in soil:** No data available.

### 12.5. Results of PBT and vPvB assessment:

No data available.

12.6. Other adverse effects: No data available.

Further information: Do not flush into surface water or sanitary sewer system.

# 13 Disposal considerations

#### 13.1. Waste treatment methods

Advice on disposal: Can be incinerated, when in compliance with local regulations.

Where possible recycling is preferred to disposal.

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Waste disposal number of used product:

200127

MUNICIPAL WASTES (HOUSEHOLD WASTE AND

SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY

COLLECTED FRACTIONS; separately collected

fractions (except 15 01); paint, inks, adhesives and resins

containing dangerous substances Classified as hazardous waste.

Contaminated packaging: Empty containers should be taken for local recycling, recovery

or waste disposal.

Contaminated packaging should be emptied as far as possible

and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the

product.

# 14 Transport information

## Land transport (ADR/RID)

**14.1. UN number:** UN 1263

14.2. UN proper shipping name:

PAINT (including paint, lacquer, enamel, stain, shellac

solutions, varnish, polish, liquid filler and liquid lacquer base)

14.3. Transport hazard class(es):

3

14.4. Packing group: III

Hazard label: 3



Classification code: F1
Limited quantity: 5 L
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

**Inland waterways transport (ADN)** 

**14.1. UN number:** UN 1263

14.2. UN proper shipping name:

PAINT (including paint, lacquer, enamel, stain, shellac

solutions, varnish, polish, liquid filler and liquid lacquer base)

14.3. Transport hazard class(es):

3

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**14.4. Packing group:** III Hazard label: 3



Classification code: F1 Limited quantity: 5 L

**Marine transport (IMDG)** 

**14.1. UN number:** UN 1263 **14.2. UN proper shipping name:** 

PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base)

14.3. Transport hazard class(es):

3

**14.4. Packing group:** III Hazard label: 3



Limited quantity: 5 L

EmS: F-E, S-E

**Air transport (ICAO)** 

**14.1. UN number:** UN 1263 **14.2. UN proper shipping name:** 

PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base)

14.3. Transport hazard class(es):

3

**14.4. Packing group:** III Hazard label: 3



Limited quantity Passenger: 10 L

IATA-packing instructions - Passenger:

355

IATA-max. quantity - Passenger:

60 L

IATA-packing instructions - Cargo:

366

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IATA-max. quantity - Cargo: 220 L

## 14.5. Environmental hazards

**ENVIRONMENTALLY HAZARDOUS:** 

Yes



# 14.6. Special precautions for user:

Handle in accordance with good industrial hygiene and safety practices.

## 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

The transport takes place only in approved and appropriate packaging.

# 15 Regulatory information

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

EU regulatory information

1999/13/EC (VOC): < 25 %

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe

employment restrictions for child bearing mothers and nursing.

## 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were

not carried out.

## 16 Other information

Changes: Changes in chapter: 2, 3

# Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

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GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

# **Relevant H- and EUH-phrases (Number and full text)**

H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information: Data of items 4 to 8, as well as 10 to 12, do partly not refer to

the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of

major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our

knowledge.

The delivery specifications are contained in the corresponding

product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

The data of this safety data sheet (section 2 to 16) were taken respectively from the last version of the sub-contractor's safety data sheet.

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

1.1. Product identifier: 5900 Solvent

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

Use of the substance/mixture:

Diluent

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

Busch GmbH & Co. KG Heidelberger Straße 26 D-68519 Viernheim

Telephone: +49 (0) 6204 – 6007 10 Telefax: +49 (0) 6204 – 6007 19 Homepage: www.busch-model.com E-Mail: info@busch-model.com

## 1.4. Emergency telephone number:

+49 (0) 228 – 19240 (Emergency poison number)

## 2 Hazards identification

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

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

Hazard categories:

Flammable liquid: Flam. Liq. 3

Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements: Flammable liquid and vapour.

May cause drowsiness or dizziness.

#### 2.2. Label elements

## Hazardous components which must be listed on the label

n-Butyl acetate

Signal word: Warning

Pictograms: GHS02-GHS07





# **Hazard statements**

H226 Flammable liquid and vapour.H336 May cause drowsiness or dizziness.

**2.3. Other hazards:** No data available.





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# 3 Composition/information on ingredients

3.2. Mixtures

Chemical characterization: Mixture of solvents

**Hazardous components** 

Chemical name: n-Butyl acetate EC-No. / CAS-No. 204-658-1 / 123-86-4

Index-No. 607-025-00-1

CLP classification: Flam. Liq. 3, STOT SE 3; H226 H336 EUH066

Quantity: < 55%

Full text of H- and EUH-phrases: see section 16.

#### 4 First aid measures

## 4.1. Description of first aid measures

General information: Remove contaminated soaked clothing immediately.

Take away from danger area and lay down affected person.

After inhalation: Move to fresh air in case of accidental inhalation of vapours.

In the event of symptoms refer for medical treatment.

After contact with skin: Wash off with soap and plenty of water.

Treat subsequently with skin cream. Consult a doctor if skin irritation persists.

After contact with eyes: Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Seek medical treatment by eye specialist.

After ingestion: Do not induce vomiting.

Summon a doctor immediately.

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

No data available.

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

Treat symptoms.

## **5** Firefighting measures

# 5.1. Extinguishing media

Suitable extinguishing media:

Alcohol-resistant foam, dry chemical, carbon dioxide (CO2),

water-spray.

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Unsuitable extinguishing media:

Full water jet.

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

Fire gas of organic material has to be classed invariably as

respiratory poison.

**5.3.** Advice for firefighters: Use breathing apparatus with independent air supply.

Protective suit.

Additional information: Cool containers at risk with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## 6 Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures:

In case of vapour formation use respirator.

Ensure adequate ventilation. Use personal protective clothing. Keep away sources of ignition.

## **6.2.** Environmental precautions:

Do not discharge into the drains/surface waters/ground water.

Do not discharge into the subsoil/soil.

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

Soak up with inert absorbent material (e.g. sand, silica gel, acid

binder, universal binder).

Shovel into suitable container for disposal.

## **6.4. Reference to other sections:**

Information for disposal see section 13.

# 7 Handling and storage

## 7.1. Precautions for safe handling

Advice on safe handling: Ensure adequate ventilation.

Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion:

Keep away from sources of ignition - No smoking.

Do not spray on a naked flame or any other incandescent

material.

# 7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Keep containers tightly closed in a cool, well-ventilated place.

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Advice on storage compatibility:

Incompatible with:

Alkaline metals and earth alkaline metals.

Powdered metals.

Strong oxidizing agents

Further information on storage conditions:

Keep away from food, drink and animal feeding stuffs.

**7.3. Specific end use(s):** No data available.

# 8 Exposure controls/personal protection

## **8.1.** Control parameters

Exposure limits (EH40)

CAS-No.	Substance	ppm	mg/m <sup>3</sup>	fibres/m <sup>3</sup>	Category	Origin
123-86-4	Butyl acetate	150 200	724 966		TWA (8 h) STEL (15 min)	WEL WEL

### **8.2.** Exposure controls

Protective and hygiene measures:

Do not inhale vapours.

Wash hands before breaks and immediately after handling the

product.

When using, do not eat, drink or smoke. Avoid contact with eyes, skin or oral tissues.

Remove and wash contaminated clothing before re-use.

Eye/face protection: Safety goggles with side protection (EN 166).

Hand protection: Splash protection:

Protective gloves resistant to chemicals made off nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 30 minutes, i.e. protective glove < Camatril

Velours 730> made by www.kcl.de.

This recommendation refers exclusively to the chemical

compatibility and the lab test conforming to EN 374 carried out

under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations

given by the manufacturer of protective gloves.

Skin protection: Long sleeved clothing (EN 368).

Respiratory protection: In case of insufficient ventilation wear suitable respiratory

equipment (gas filter type A) (EN 14387).





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# 9 Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state: Liquid Colour: Colourless Odour: characteristic

pH-Value: n.a.

27 - 40 °C Flash point:

Lower explosion limits: n.d.

Upper explosion limits:

Vapour pressure: approx. 10 hPa

(at 20 °C)

Density (at 20 °C): approx. 1 g/cm<sup>3</sup> Water solubility: Partially miscible

(at 20 °C)

Ignition temperature: > 300 °C

9.2. Other information: No data available.

# 10 Stability and reactivity

10.1. Reactivity: No data available.

**10.2.** Chemical stability: No data available. 10.3. Possibility of hazardous reactions:

No data available.

**10.4. Conditions to avoid:** To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials:

Strong oxidizing agents

10.6. Hazardous decomposition products:

Carbon monoxide and carbon dioxide.

Further information: No decomposition if stored and applied as directed.

# 11 Toxicological information

# 11.1. Information on toxicological effects

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

CAS-No. / Chemical name 123-86-4 / n-Butyl acetate

Exposure routes	s Method		Species
oral	LD50 mg/kg	10800	Rat
dermal	LD50 mg/kg	Ã17600	Rabbit

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Irritation and corrosivity: Based on available data, the classification criteria are not met.

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

STOT-single exposure: Vapours may cause drowsiness and dizziness. (n-Butyl acetate)

Severe effects after repeated or prolonged exposure:

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

Carcinogenic/mutagenic/toxic effects for reproduction:

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

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

Practical experience

Observations relevant to classification:

Repeated exposure may cause skin dryness or cracking.

Vapours may cause drowsiness and dizziness.

Further information: No toxicological data available.

## 12 Ecological information

**12.1. Toxicity:** No data available.

CAS-No. / Chemical name 123-86-4 / n-Butyl acetate

Aquatic toxicity	Method	Dose	[h] [d]	Species
Acute fish toxicity	LC50	à 10 mg/l	96 h	

# 12.2. Persistence and degradability:

No data available.

12.3. Bioaccumulative potential:

No data available.

**12.4. Mobility in soil:** No data available.

#### 12.5. Results of PBT and vPvB assessment:

No data available.

12.6. Other adverse effects: No data available.

Further information: Do not flush into surface water or sanitary sewer system.

Low hazard to waters.

## 13 Disposal considerations

### 13.1. Waste treatment methods

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Advice on disposal: Can be incinerated, when in compliance with local regulations.

Where possible recycling is preferred to disposal.

Waste disposal number of used product:

140603

WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08); waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and

solvent mixtures

Classified as hazardous waste.

Contaminated packaging: Empty containers should be taken for local recycling, recovery

or waste disposal.

Contaminated packaging should be emptied as far as possible

and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the

product.

# 14 Transport information

Land transport (ADR/RID)

**14.1. UN number:** UN 1123

14.2. UN proper shipping name:

BUTYLACETATES(BUTYLACETATES)

14.3. Transport hazard class(es):

3

**14.4. Packing group:** III Hazard label: 3



Classification code: F1
Limited quantity: 5 L
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

**Inland waterways transport (ADN)** 

**14.1. UN number:** UN 1123

14.2. UN proper shipping name:

BUTYL ACETATES (BUTYLACETATES)

14.3. Transport hazard class(es):

3

**14.4. Packing group:** III Hazard label: 3



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Classification code: F1 Limited quantity: 5 L

**Marine transport (IMDG)** 

**14.1. UN number:** UN 1123

14.2. UN proper shipping name:

**BUTYLACETATES** 

14.3. Transport hazard class(es):

3

**14.4. Packing group:** III Hazard label: 3



Limited quantity: 5 L

EmS: F-E, S-D

**Air transport (ICAO)** 

**14.1. UN number:** UN 1123

14.2. UN proper shipping name:

**BUTYLACETATES** 

14.3. Transport hazard class(es):

3

**14.4. Packing group:** III Hazard label: 3



Limited quantity Passenger: 10 L

IATA-packing instructions - Passenger:

355

IATA-max. quantity - Passenger:

60 L

IATA-packing instructions - Cargo:

366

IATA-max. quantity - Cargo: 220 L

## 14.5. Environmental hazards

**ENVIRONMENTALLY HAZARDOUS:** 

No

# 14.6. Special precautions for user:

No specific precautions required.

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# 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

The transport takes place only in approved and appropriate packaging.

# 15 Regulatory information

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

EU regulatory information

1999/13/EC (VOC): < 50 %

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe

employment restrictions for child bearing mothers and nursing.

## 16 Other information

Changes: Changes in chapter: 2, 3

## **Abbreviations and acronyms**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

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# Relevant H- and EUH-phrases (Number and full text)

H226 Flammable liquid and vapour.H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information: Data of items 4 to 8, as well as 10 to 12, do partly not refer to

the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of

major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our

knowledge.

The delivery specifications are contained in the corresponding

product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

The data of this safety data sheet (section 2 to 16) were taken respectively from the last version of the sub-contractor's safety data sheet.