

# SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

## ALU 1000 AEROSOL

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

#### 1.1. Product identifier

**Product name** : ALU 1000 AEROSOL  
**Registration number REACH** : Not applicable (mixture)  
**Product type REACH** : Mixture

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

##### 1.2.1 Relevant identified uses

Lacquer/varnish  
Coating  
Anti-corrosion agent

##### 1.2.2 Uses advised against

No uses advised against known

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

##### Supplier of the safety data sheet

Novatio\*  
Industrielaan 5B  
B-2250 Olen  
☎ +32 14 25 76 40  
☎ +32 14 22 02 66  
info@novatio.be  
\*NOVATIO is a registered trademark of Novatech International N.V.

##### Manufacturer of the product

Novatech International N.V.  
Industrielaan 5B  
B-2250 Olen  
☎ +32 14 85 97 37  
☎ +32 14 85 97 38  
info@tec7.be

#### 1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :  
+32 14 58 45 45 (BIG)

### SECTION 2: Hazards identification

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

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Aerosol	category 1	H222: Extremely flammable aerosol.
Aerosol	category 1	H229: Pressurised container: May burst if heated.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
STOT SE	category 3	H336: May cause drowsiness or dizziness.
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements



Contains: acetone; ethyl acetate; hydrocarbons, C9, aromatics; n-butyl acetate.

**Signal word** Danger

##### H-statements

H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H412 Harmful to aquatic life with long lasting effects.

##### P-statements

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P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P280	Wear eye protection
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F.

**Supplemental information**  
EUH066

Repeated exposure may cause skin dryness or cracking.

### 2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name REACH Registration No	CAS No EC No List No	Conc. (C)	Classification according to CLP	Note	Remark
acetone 01-2119471330-49	67-64-1 200-662-2	10%<C<20%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent
ethyl acetate 01-2119475103-46	141-78-6 205-500-4	15%<C<20%	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	(1)(2)(10)	Constituent
xylene 01-2119488216-32	1330-20-7 215-535-7	5%<C<10%	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Asp. Tox. 1; H304 STOT RE 2; H373 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Aquatic Chronic 3; H412	(1)(2)(6)(10)	Constituent
hydrocarbons, C9, aromatics 01-2119455851-35	918-668-5	2.5%<C<10%	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H335 STOT SE 3; H336 Aquatic Chronic 2; H411	(1)(10)	Constituent
n-butyl acetate 01-2119485493-29	123-86-4 204-658-1	1%<C<10%	Flam. Liq. 3; H226 STOT SE 3; H336	(1)(2)(10)	Constituent
aluminium powder 01-2119529243-45	7429-90-5 231-072-3	1%<C<10%	Flam. Sol. 1; H228 Water-react. 2; H261	(1)(2)(10)	Constituent
propane 01-2119486944-21	74-98-6 200-827-9	10%<C<20%	Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant
butane 01-2119474691-32	106-97-8 203-448-7	10%<C<20%	Flam. Gas 1; H220 Press. Gas - Liquefied gas; H280	(1)(2)(10)	Propellant

(1) For H-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

Note: numbers 9xx-xxx-x are provisional list numbers assigned by Echa pending an official EC inventory number

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General:**

If you feel unwell, seek medical advice.

**After inhalation:**

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

**After skin contact:**

Rinse with water. Do not apply (chemical) neutralizing agents without medical advice. Soap may be used. Take victim to a doctor if irritation persists.

**After eye contact:**

Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice. Take victim to an ophthalmologist if irritation persists.

**After ingestion:**

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Rinse mouth with water. Do not apply (chemical) neutralizing agents without medical advice. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

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

### 4.2.1 Acute symptoms

#### After inhalation:

EXPOSURE TO HIGH CONCENTRATIONS: Central nervous system depression. Headache. Dizziness. Narcosis. Disturbances of consciousness.

#### After skin contact:

ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking of the skin.

#### After eye contact:

Irritation of the eye tissue.

#### After ingestion:

No effects known.

### 4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### 5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher.

#### 5.1.2 Unsuitable extinguishing media:

Small fire: Quick-acting CO2 extinguisher, Water (water can be used to control jet flame), Foam.

Major fire: Water (water can be used to control jet flame), Foam.

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

Upon combustion: CO and CO2 are formed. Pressurised container: May burst if heated.

### 5.3. Advice for firefighters

#### 5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistent risk of physical explosion. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective goggles. Head/neck protection. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6: Accidental release measures

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

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

#### 6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves. Protective goggles. Head/neck protection. Protective clothing.

#### Suitable protective clothing

See heading 8.2

### 6.2. Environmental precautions

Dam up the liquid spill.

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

Take up liquid spill into a non combustible material e.g.: sand/earth. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers.

Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

### 6.4. Reference to other sections

See heading 13.

## SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 7.1. Precautions for safe handling

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards. Avoid prolonged and repeated contact with skin.

### 7.2. Conditions for safe storage, including any incompatibilities

#### 7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Store in a cool area. Keep out of direct sunlight. Ventilation at floor level. Fireproof storeroom. Meet the legal requirements.

#### 7.2.2 Keep away from:

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Heat sources, ignition sources, combustible materials.

## 7.2.3 Suitable packaging material:

Aerosol.

## 7.2.4 Non suitable packaging material:

No data available

## 7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 Occupational exposure

##### a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

#### EU

Acetone	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	500 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	1210 mg/m <sup>3</sup>
Ethyl acetate	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	200 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	734 mg/m <sup>3</sup>
	Short time value (Indicative occupational exposure limit value)	400 ppm
Xylene, mixed isomers, pure	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	50 ppm
	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	221 mg/m <sup>3</sup>
	Short time value (Indicative occupational exposure limit value)	100 ppm
	Short time value (Indicative occupational exposure limit value)	442 mg/m <sup>3</sup>

#### Belgium

Acétate d'éthyle	Time-weighted average exposure limit 8 h	200 ppm
	Time-weighted average exposure limit 8 h	734 mg/m <sup>3</sup>
	Short time value	400 ppm
	Short time value	1468 mg/m <sup>3</sup>
Acétate de n-butyle	Time-weighted average exposure limit 8 h	50 ppm
	Time-weighted average exposure limit 8 h	238 mg/m <sup>3</sup>
	Short time value	150 ppm
	Short time value	712 mg/m <sup>3</sup>
Acétone	Time-weighted average exposure limit 8 h	500 ppm
	Time-weighted average exposure limit 8 h	1210 mg/m <sup>3</sup>
	Short time value	1000 ppm
	Short time value	2420 mg/m <sup>3</sup>
Aluminium (métal et composés insolubles, fraction alvéolaire) Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3)	Time-weighted average exposure limit 8 h	1 mg/m <sup>3</sup>
	Time-weighted average exposure limit 8 h	1000 ppm
	Short time value	980 ppm
	Short time value	2370 mg/m <sup>3</sup>
Xylène, isomères mixtes, purs	Time-weighted average exposure limit 8 h	50 ppm
	Time-weighted average exposure limit 8 h	221 mg/m <sup>3</sup>
	Short time value	100 ppm
	Short time value	442 mg/m <sup>3</sup>

#### The Netherlands

Aceton	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	501 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	1210 mg/m <sup>3</sup>
	Short time value (Public occupational exposure limit value)	1002 ppm
	Short time value (Public occupational exposure limit value)	2420 mg/m <sup>3</sup>
Ethylacetaat	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	734 mg/m <sup>3</sup>
	Short time value (Public occupational exposure limit value)	1468 mg/m <sup>3</sup>
Xyleen (o-,m- en p-isomeren)	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	48 ppm

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Xyleen (o-,m- en p-isomeren)	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	210 mg/m <sup>3</sup>
	Short time value (Public occupational exposure limit value)	100 ppm
	Short time value (Public occupational exposure limit value)	442 mg/m <sup>3</sup>

## France

Acétate de n-butyle	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	150 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	710 mg/m <sup>3</sup>
	Short time value (VL: Valeur non réglementaire indicative)	200 ppm
	Short time value (VL: Valeur non réglementaire indicative)	940 mg/m <sup>3</sup>
Acétate d'éthyle	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	400 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1400 mg/m <sup>3</sup>
Acétone	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	500 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	1210 mg/m <sup>3</sup>
	Short time value (VRC: Valeur réglementaire contraignante)	1000 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	2420 mg/m <sup>3</sup>
Aluminium (métal)	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	10 mg/m <sup>3</sup>
Aluminium (pulvérulent)	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	5 mg/m <sup>3</sup>
n-Butane	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	800 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	1900 mg/m <sup>3</sup>
Xylènes, isomères mixtes, purs	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	50 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	221 mg/m <sup>3</sup>
	Short time value (VRC: Valeur réglementaire contraignante)	100 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	442 mg/m <sup>3</sup>

## Germany

Aceton	Time-weighted average exposure limit 8 h (TRGS 900)	500 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1200 mg/m <sup>3</sup>
Butan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	2400 mg/m <sup>3</sup>
Ethylacetat	Time-weighted average exposure limit 8 h (TRGS 900)	200 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	730 mg/m <sup>3</sup>
n-Butylacetat	Time-weighted average exposure limit 8 h (TRGS 900)	62 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	300 mg/m <sup>3</sup>
Propan	Time-weighted average exposure limit 8 h (TRGS 900)	1000 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	1800 mg/m <sup>3</sup>
Xylol (alle Isomeren)	Time-weighted average exposure limit 8 h (TRGS 900)	100 ppm
	Time-weighted average exposure limit 8 h (TRGS 900)	440 mg/m <sup>3</sup>

## UK

Acetone	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	500 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1210 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	1500 ppm
	Short time value (Workplace exposure limit (EH40/2005))	3620 mg/m <sup>3</sup>
Aluminium metal inhalable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m <sup>3</sup>
Aluminium metal respirable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	4 mg/m <sup>3</sup>
Butane	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	600 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	1450 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	750 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1810 mg/m <sup>3</sup>
Butyl acetate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	150 ppm

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Butyl acetate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	724 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	200 ppm
	Short time value (Workplace exposure limit (EH40/2005))	966 mg/m <sup>3</sup>
Ethyl acetate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	200 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	734 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	400 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1468 mg/m <sup>3</sup>
Xylene, o-,m-,p- or mixed isomers	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	50 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	220 mg/m <sup>3</sup>
	Short time value (Workplace exposure limit (EH40/2005))	100 ppm
	Short time value (Workplace exposure limit (EH40/2005))	441 mg/m <sup>3</sup>

## USA (TLV-ACGIH)

Acetone	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	250 ppm
	Short time value (TLV - Adopted Value)	500 ppm
Aluminium, Metal	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1 mg/m <sup>3</sup> (R)
Butane, all isomers	Short time value (TLV - Adopted Value)	1000 ppm
Butyl acetates, all isomers	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	50 ppm
	Short time value (TLV - Adopted Value)	150 ppm
Ethyl acetate	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	400 ppm
Xylene (all isomers)	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	100 ppm
	Short time value (TLV - Adopted Value)	150 ppm

(R): Respirable fraction

## b) National biological limit values

If limit values are applicable and available these will be listed below.

### Germany

Aceton (Aceton)	Urin: expositionsende, bzw. schichtende	80 mg/l	11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Aluminium (Aluminium)	Urin: bei langzeitexposition: am schichtende nach mehreren vorangegangenen schichten	50 µg/g Kreatinin	11/2018 DFG
Xylol (alle isomeren) (Methylhippur-(Tolur-) säure (alle isomere))	Urin: expositionsende, bzw. schichtende	2000 mg/l	11/2016 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG
Xylol (alle isomeren) (Xylol)	Vollblut: expositionsende, bzw. schichtende	1,5 mg/l	11/2016 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG

### UK

Xylene, o-, m-, p- or mixed isomers (methyl hippuric acid)	Urine: post shift	650 mmol/mol creatinine	
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## USA (BEI-ACGIH)

Acetone (Acetone)	Urine: end of shift	25 mg/L	
Xylen (Methylhippuric acids)	Urine: end of shift	1,5 g/g creatinine	

### 8.1.2 Sampling methods

Product name	Test	Number
Acetone (ketones 1)	NIOSH	1300
Acetone (ketones I)	NIOSH	2555
Acetone (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
Acetone (Volatile Organic compounds)	NIOSH	2549
ACETONE and METHYL ETHYL KETONE in urine	NIOSH	8319
Acetone	OSHA	69
Aluminium	NIOSH	7013
Aluminum (Al)	NIOSH	7302
Aluminum (Al)	NIOSH	7304
Aluminum (Al)	NIOSH	7306
Aluminum (Al)	NIOSH	8310
Aluminum (Elements)	NIOSH	7300
Aluminum (Elements, aqua regia ashing)	NIOSH	7301
Aluminum (Elements, hot block/HCl/HNO <sub>3</sub> digestion)	NIOSH	7303
Aluminum	OSHA	ID121
Butyl acetate (Volatile Organic compounds)	NIOSH	2549
Ethyl acetate (Volatile Organic compounds)	NIOSH	2549
Ethyl Acetate	NIOSH	1457

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Product name	Test	Number
Ethyl Acetate	OSHA	7
n-Butyl Acetate (Esters I)	NIOSH	1450
n-Butyl Acetate	OSHA	1009
Xylene (Hydrocarbons, aromatic)	NIOSH	1501
Xylene (Volatile Organic compounds)	NIOSH	2549

## 8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

## 8.1.4 Threshold values

### DNEL/DMEL - Workers

#### acetone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1210 mg/m <sup>3</sup>	
	Acute local effects inhalation	2420 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	186 mg/kg bw/day	

#### ethyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	734 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	1468 mg/m <sup>3</sup>	
	Long-term local effects inhalation	734 mg/m <sup>3</sup>	
	Acute local effects inhalation	1468 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	63 mg/kg bw/day	

#### xylene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	221 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	442 mg/m <sup>3</sup>	
	Long-term local effects inhalation	221 mg/m <sup>3</sup>	
	Acute local effects inhalation	442 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	212 mg/kg bw/day	

#### hydrocarbons, C9, aromatics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	150 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	25 mg/kg bw/day	

#### n-butyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	300 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	600 mg/m <sup>3</sup>	
	Long-term local effects inhalation	300 mg/m <sup>3</sup>	
	Acute local effects inhalation	600 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	11 mg/m <sup>3</sup>	
	Acute systemic effects dermal	11 mg/m <sup>3</sup>	

#### aluminium powder

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3.72 mg/m <sup>3</sup>	
	Long-term local effects inhalation	3.72 mg/m <sup>3</sup>	

### DNEL/DMEL - General population

#### acetone

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	200 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	62 mg/kg bw/day	
	Long-term systemic effects oral	62 mg/kg bw/day	

#### ethyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	367 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	734 mg/m <sup>3</sup>	
	Long-term local effects inhalation	367 mg/m <sup>3</sup>	
	Acute local effects inhalation	734 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	37 mg/kg bw/day	
	Long-term systemic effects oral	4.5 mg/kg bw/day	

#### xylene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	65.3 mg/m <sup>3</sup>	
	Acute systemic effects inhalation	260 mg/m <sup>3</sup>	
	Long-term local effects inhalation	65.3 mg/m <sup>3</sup>	
	Acute local effects inhalation	260 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	125 mg/kg bw/day	
	Long-term systemic effects oral	12.5 mg/kg bw/day	

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hydrocarbons, C9, aromatics

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	32 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	11 mg/kg bw/day	
	Long-term systemic effects oral	11 mg/kg bw/day	

n-butyl acetate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term local effects inhalation	35.7 mg/m <sup>3</sup>	
	Acute local effects inhalation	300 mg/m <sup>3</sup>	
	Long-term local effects inhalation	35.7 mg/m <sup>3</sup>	
	Acute local effects inhalation	300 mg/m <sup>3</sup>	
	Long-term systemic effects dermal	6 mg/m <sup>3</sup>	
	Acute systemic effects dermal	6 mg/m <sup>3</sup>	
	Long-term systemic effects oral	2 mg/m <sup>3</sup>	
	Acute systemic effects oral	2 mg/m <sup>3</sup>	

aluminium powder

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects oral	7.9 mg/kg bw/day	

PNEC

acetone

Compartments	Value	Remark
Fresh water	10.6 mg/l	
Aqua (intermittent releases)	21 mg/l	
Marine water	1.06 mg/l	
STP	100 mg/l	
Fresh water sediment	30.4 mg/kg sediment dw	
Marine water sediment	3.04 mg/kg sediment dw	
Soil	29.5 mg/kg soil dw	

ethyl acetate

Compartments	Value	Remark
Fresh water	0.24 mg/l	
Aqua (intermittent releases)	1.65 mg/l	
Marine water	0.024 mg/l	
STP	650 mg/l	
Fresh water sediment	1.15 mg/kg sediment dw	
Marine water sediment	0.115 mg/kg sediment dw	
Soil	0.148 mg/kg soil dw	
Oral	0.2 g/kg food	

xylene

Compartments	Value	Remark
Fresh water	0.327 mg/l	
Marine water	0.327 mg/l	
Aqua (intermittent releases)	0.327 mg/l	
STP	6.58 mg/l	
Fresh water sediment	12.46 mg/kg sediment dw	
Marine water sediment	12.46 mg/kg sediment dw	
Soil	2.31 mg/kg soil dw	

n-butyl acetate

Compartments	Value	Remark
Fresh water	0.18 mg/l	
Marine water	0.018 mg/l	
Aqua (intermittent releases)	0.36 mg/l	
STP	35.6 mg/l	
Fresh water sediment	0.981 mg/kg sediment dw	
Marine water sediment	0.098 mg/kg sediment dw	
Soil	0.09 mg/kg soil dw	

aluminium powder

Compartments	Value	Remark
Fresh water	74.9 µg/l	
STP	20 mg/l	

## 8.1.5 Control banding

If applicable and available it will be listed below.

## 8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 8.2.1 Appropriate engineering controls

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

### 8.2.2 Individual protection measures, such as personal protective equipment

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Observe normal hygiene standards. Avoid prolonged and repeated contact with skin. Do not eat, drink or smoke during work.

**a) Respiratory protection:**

Full face mask with filter type A at conc. in air > exposure limit.

**b) Hand protection:**

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Remark	Protection index
nitrile rubber	> 480 minutes	0.7 mm	Class 6

**c) Eye protection:**

Protective goggles.

**d) Skin protection:**

Protective clothing. Head/neck protection.

**8.2.3 Environmental exposure controls:**

See headings 6.2, 6.3 and 13

## SECTION 9: Physical and chemical properties

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

Physical form	Aerosol
Odour	Characteristic odour
Odour threshold	No data available
Colour	Silvery-grey
Particle size	No data available
Explosion limits	No data available
Flammability	Extremely flammable aerosol.
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	No data available
Evaporation rate	No data available
Relative vapour density	> 1
Vapour pressure	No data available
Solubility	No data available
Relative density	No data available
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Flash point	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available

### 9.2. Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

### 10.2. Chemical stability

No data available.

### 10.3. Possibility of hazardous reactions

No data available.

### 10.4. Conditions to avoid

**Precautionary measures**

Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

### 10.5. Incompatible materials

Combustible materials.

### 10.6. Hazardous decomposition products

Upon combustion: CO and CO<sub>2</sub> are formed.

# ALU 1000 AEROSOL

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### 11.1.1 Test results

##### Acute toxicity

##### ALU 1000 AEROSOL

No (test) data on the mixture available

Judgement is based on the relevant ingredients

##### acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	5800 mg/kg		Rat (female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	20000 mg/kg		Rabbit (male)	Experimental value	
Inhalation (vapours)	LC50	Other	76 mg/l	4 h	Rat (female)	Experimental value	

##### ethyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	10200 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	24 hour cuff method	> 20000 mg/kg bw	24 h	Rabbit (male)	Experimental value	
Inhalation (vapours)	LC0	Equivalent to OECD 403	29.3 mg/l	4 h	Rat	Experimental value	

##### xylene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to EU Method B.1	3523 mg/kg bw		Rat (male)	Experimental value	
Dermal	LD50		> 4200 mg/kg bw	4 h	Rabbit (male)	Experimental value	
Dermal			category 4			Annex VI	
Inhalation (vapours)	LC50	Equivalent to EU Method B.2	29 mg/l	4 h	Rat (male)	Experimental value	
Inhalation			category 4			Annex VI	

##### hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		> 6984 mg/kg bw		Rat (male)	Experimental value	
Oral	LD50		3492 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 3160 mg/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	> 6.193 mg/l air	4 h	Rat (male / female)	Experimental value	

##### n-butyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 423	12789 mg/kg		Rat (male)	Experimental value	
Oral	LD50	Equivalent to OECD 423	10760 mg/kg bw		Rat (female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 14112 mg/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation (vapours)	LC50	OECD 403	> 21.1 mg/l air	4 h	Rat (male / female)	Experimental value	

##### aluminium powder

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 15900 mg/kg bw		Rat (male / female)	Read-across	
Dermal						Data waiving	
Inhalation (aerosol)	LC50	Equivalent to OECD 403	> 0.89 mg/l air	4 h	Rat (male)	Experimental value	

##### Conclusion

Not classified for acute toxicity

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## Corrosion/irritation

### ALU 1000 AEROSOL

No (test)data on the mixture available

Classification is based on the relevant ingredients

#### acetone

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405		24; 48; 72 hours	Rabbit	Weight of evidence	
Skin	Not irritating	Other	3 day(s)	24; 48; 72 hours	Guinea pig	Weight of evidence	
Inhalation	Slightly irritating	Human observation study	20 minutes		Human	Literature	

#### ethyl acetate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Slightly irritating	Equivalent to OECD 405		1; 24; 48; 72 hrs; 7; 14; 21 days	Rabbit	Experimental value	Single treatment
Eye	Irritating; category 2					Annex VI	
Skin	Slightly irritating	Equivalent to OECD 404	24 h	24; 48; 72 hours	Rabbit	Experimental value	

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

#### xylene

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Moderately irritating			24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Eye	category 2					Annex VI	
Skin	Moderately irritating		24 h	24; 72 hours	Rabbit	Experimental value	
Skin	category 2					Annex VI	
Inhalation (vapours)	Irritating		4 h		Human	Read-across	
Inhalation	STOT SE cat.3					Annex VI	

#### hydrocarbons, C9, aromatics

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		1; 24; 48; 72 hours	Rabbit	Experimental value	
Skin	Slightly irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	
Inhalation	Irritating; STOT SE cat.3					Expert judgement	

#### n-butyl acetate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Skin	Not irritating	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	
Inhalation (vapours)	Slightly irritating	Human observation	3 minutes - 5 minutes		Human	Experimental value	

#### aluminium powder

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating			24; 48; 72 hours	Rabbit	Read-across	
Skin	Not irritating	Equivalent to OECD 404	24 h	24; 48; 72 hours	Rabbit	Read-across	

## Conclusion

Causes serious eye irritation.

Not classified as irritating to the respiratory system

## Respiratory or skin sensitisation

### ALU 1000 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

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# ALU 1000 AEROSOL

## acetone

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Human observation			Human	Literature	

## ethyl acetate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Intradermal	Not sensitizing	OECD 406		24; 48 hours	Guinea pig (female)	Experimental value	

## xylene

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 429			Mouse	Experimental value	

## hydrocarbons, C9, aromatics

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406		24; 48 hours	Guinea pig (female)	Experimental value	

## n-butyl acetate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing		24 h	24 hours	Human	Inconclusive, insufficient data	

## aluminium powder

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing				Guinea pig (male)	Read-across	
Intratracheal instillation	Not sensitizing				Mouse (male)	Read-across	

## Conclusion

Not classified as sensitizing for inhalation  
Not classified as sensitizing for skin

## Specific target organ toxicity

### ALU 1000 AEROSOL

No (test) data on the mixture available

Classification is based on the relevant ingredients

#### acetone

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOAEL	Equivalent to OECD 408	20 mg/l		No effect	13 week(s)	Mouse (male / female)	Experimental value
Dermal								Not relevant, expert judgement
Inhalation (vapours)	NOAEC	Other	19000 ppm		No effect	8 week(s)	Rat (male)	Literature
Inhalation (vapours)	Dose level	Human observation study	361 ppm	Central nervous system	neurotoxic effects	2 day(s)	Human	Epidemiological study

#### ethyl acetate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	EPA OTS 795.2600	900 mg/kg bw/day	General	No effect	90 day(s) - 92 day(s)	Rat (male / female)	Experimental value
Oral (stomach tube)	LOAEL	EPA OTS 795.2600	3600 mg/kg bw/day	General	Body weight, organ weight, food consumption	90 day(s) - 92 day(s)	Rat (male / female)	Experimental value
Inhalation	NOEC	EPA OTS 798.2450	350 ppm	General	No adverse systemic effects	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation			STOT SE cat.3		Drowsiness, dizziness			Annex VI

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# ALU 1000 AEROSOL

## xylene

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	LOAEL	Equivalent to OECD 408	150 mg/kg bw/day	Liver	Weight gain	90 day(s)	Rat (male)	Experimental value
Inhalation (vapours)	NOAEC		≥ 3515 mg/m <sup>3</sup>		No effect	13 weeks (6h / day, 5 days / week)	Rat (male)	Experimental value

## hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	Equivalent to OECD 408	600 mg/kg bw/day		No effect	13 weeks (daily)	Rat (male / female)	Read-across
Dermal								Data waiving
Inhalation (vapours)	NOAEC	Equivalent to OECD 452	1800 mg/m <sup>3</sup> air		No effect	52 weeks (6h / day, 5 days / week)	Rat (male)	Read-across

## n-butyl acetate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Inhalation (vapours)	NOAEC	EPA OTS 798.2450	500 ppm		No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value
Inhalation (vapours)				Central nervous system	Drowsiness, dizziness			Literature study

## aluminium powder

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (stomach tube)	NOAEL	OECD 422	200 mg/kg bw/day		No effect	28 day(s) - 53 day(s)	Rat (male / female)	Read-across
Inhalation (dust)	LOAEC	Equivalent to OECD 413	50 mg/m <sup>3</sup> air	Lungs	Lung tissue affection/degeneration	25 weeks (6h / day, 5 days / week) - 52 weeks (6h / day, 5 days / week)	Rat	Experimental value

## Conclusion

May cause drowsiness or dizziness.  
Not classified for subchronic toxicity

## Mutagenicity (in vitro)

### ALU 1000 AEROSOL

No (test) data on the mixture available  
Judgement is based on the relevant ingredients

#### acetone

Result	Method	Test substrate	Effect	Value determination	Remark
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

#### ethyl acetate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

#### xylene

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to EU Method B.19	Chinese hamster ovary (CHO)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

#### hydrocarbons, C9, aromatics

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)	No effect	Experimental value	

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## n-butyl acetate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria ( <i>S.typhimurium</i> )	No effect	Experimental value	
Negative without metabolic activation	Equivalent to OECD 473	Chinese hamster lung fibroblasts (V79)	No effect	Experimental value	

## aluminium powder

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Read-across	
Positive without metabolic activation	Equivalent to OECD 473	Human lymphocytes		Read-across	

## **Conclusion**

Not classified for mutagenic or genotoxic toxicity

## **Mutagenicity (in vivo)**

### ALU 1000 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

#### acetone

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative		13 week(s)	Mouse (male / female)		Literature

#### ethyl acetate

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 474		Mouse (male)		Experimental value

#### xylene

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 478		Mouse (male / female)		Experimental value

#### hydrocarbons, C9, aromatics

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	Equivalent to OECD 475	5 day(s)	Rat (male)	Bone marrow	Experimental value

#### n-butyl acetate

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 474	24 h	Mouse (male / female)	Bone marrow	Read-across

#### aluminium powder

Result	Method	Exposure time	Test substrate	Organ	Value determination
Positive (Oral (stomach tube))	OECD 474		Rat (male / female)	Bone marrow	Read-across

## **Conclusion**

Not classified for mutagenic or genotoxic toxicity

## **Carcinogenicity**

### ALU 1000 AEROSOL

No (test)data on the mixture available

Judgement is based on the relevant ingredients

#### acetone

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Dermal	NOEL	Other	79 mg	51 week(s)	Mouse (female)	No effect		Literature

#### xylene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Oral	NOAEL	Equivalent to EU Method B.32	≥ 500 mg/kg bw/day	103 weeks (5 days / week)	Rat (male / female)	No carcinogenic effect		Experimental value
Oral	NOAEL	Equivalent to EU Method B.32	≥ 1000 mg/kg bw/day	103 weeks (5 days / week)	Mouse (male / female)	No carcinogenic effect		Experimental value

#### hydrocarbons, C9, aromatics

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Unknown								Data waiving

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## n-butyl acetate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation								Data waiving
Dermal								Data waiving
Oral								Data waiving

## aluminium powder

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (dust)	LOAEC	Equivalent to OECD 413	15 mg/m <sup>3</sup> air		Rat	Lung tissue affection/degeneration	Lungs	Experimental value

### **Conclusion**

Not classified for carcinogenicity

### **Reproductive toxicity**

#### ALU 1000 AEROSOL

No (test) data on the mixture available

Judgement is based on the relevant ingredients

#### acetone

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	11000 ppm	6 days (gestation, daily) - 19 days (gestation, daily)	Rat (male / female)			Experimental value
Effects on fertility	NOAEL	Other	900 mg/kg bw/day	13 week(s)	Rat (male)	No effect		Literature

#### ethyl acetate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	> 3600 mg/kg bw/day	7 day(s)	Mouse	No effect	Foetus	Read-across
Maternal toxicity	NOAEL	Equivalent to OECD 414	2200 mg/kg bw/day	8 days (gestation, daily) - 14 days (gestation, daily)	Mouse	No effect		Read-across
	LOAEL	Equivalent to OECD 414	3600 mg/kg bw/day	8 days (gestation, daily) - 14 days (gestation, daily)	Mouse	Mortality	General	Read-across
Effects on fertility	NOAEL	Equivalent to OECD 416	20700 mg/kg bw/day	13 weeks (6h / day, 5 days / week)	Mouse (male / female)	No effect		Experimental value

#### xylene

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Inhalation (vapours))	BMCL10	Equivalent to OECD 414	1082 ppm	15 days (gestation, daily)	Rat (female)	No effect		Experimental value
Maternal toxicity (Inhalation (vapours))	BMCL10	Equivalent to OECD 414	887 ppm	15 days (gestation, daily)	Rat (female)	No effect		Experimental value
Effects on fertility (Inhalation (vapours))	NOAEC (P)	EPA OPPTS 870.3800	≥ 500 ppm	70 days (6h / day)	Rat (male / female)	No effect		Read-across

#### hydrocarbons, C9, aromatics

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEC		100 ppm	10 day(s)	Mouse	No effect	Foetus	Experimental value
	LOAEC		500 ppm	10 day(s)	Mouse	Reduced foetal bodyweights	Foetus	Experimental value
Maternal toxicity	NOAEC		100 ppm	10 day(s)	Mouse	No effect		Experimental value
	LOAEC		500 ppm	10 day(s)	Mouse	Body weight reduction	General	Experimental value
Effects on fertility	NOAEC	3 generation study	7500 mg/m <sup>3</sup>		Rat (male / female)	No effect		Experimental value

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# ALU 1000 AEROSOL

## n-butyl acetate

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	LOAEC	Equivalent to OECD 414	1500 ppm	6 day(s)	Rat	Minor skeletal variations	Foetus	Experimental value
Maternal toxicity	LOAEC	Equivalent to OECD 414	1500 ppm	6 day(s)	Rat	Reduced food consumption	General	Experimental value
Effects on fertility	NOAEC	OECD 416	2000 ppm	70 day(s)	Rat (male / female)	No effect		Experimental value

## aluminium powder

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	266 mg/kg bw/day	10 day(s)	Rat	No effect	Foetus	Read-across
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	266 mg/kg bw/day	10 day(s)	Rat	No effect		Read-across
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	1000 mg/kg bw/day	28 day(s) - 53 day(s)	Rat (male / female)	No effect		Read-across

### **Conclusion**

Not classified for reprotoxic or developmental toxicity

### **Toxicity other effects**

#### ALU 1000 AEROSOL

No (test)data on the mixture available

#### acetone

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study Skin

#### ethyl acetate

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Dehydration	6 days (1x / day)	Human	Experimental value Skin
			Skin	Skin dryness or cracking			Literature Skin

#### hydrocarbons, C9, aromatics

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study

#### n-butyl acetate

Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
			Skin	Skin dryness or cracking			Literature study

### **Conclusion**

Repeated exposure may cause skin dryness or cracking.

### **Chronic effects from short and long-term exposure**

#### ALU 1000 AEROSOL

No effects known.

## SECTION 12: Ecological information

### **12.1. Toxicity**

#### ALU 1000 AEROSOL

No (test)data on the mixture available

Classification is based on the relevant ingredients



# ALU 1000 AEROSOL

## acetone

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EU Method C.1	5540 mg/l	96 h	Salmo gairdneri	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	LC50	Other	12600 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EC50		> 7000 mg/l	96 h	Selenastrum capricornutum	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity aquatic crustacea	NOEC	Equivalent to OECD 211	2212 mg/l	28 day(s)	Daphnia magna	Flow-through system	Fresh water	Experimental value

## ethyl acetate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	US EPA	230 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value
Acute toxicity crustacea	EC50		154 mg/l	48 h	Daphnia magna			Literature
Toxicity algae and other aquatic plants	NOEC	OECD 201	> 100 mg/l	72 h	Scenedesmus subspicatus	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC	ECOSAR v1.00	6.3 mg/l	32 day(s)	Pisces		Fresh water	QSAR
	NOEC	OECD 210	< 9.65 mg/l	32 day(s)	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	Equivalent to OECD 211	2.4 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms	EC50		5870 mg/l	15 minutes	Photobacterium phosphoreum	Static system	Salt water	Experimental value; Inhibition

## xylene

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	2.6 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Read-across; Lethal
Acute toxicity crustacea	IC50	OECD 202	1 mg/l	24 h	Daphnia magna	Static system	Fresh water	Read-across
Toxicity algae and other aquatic plants	ErC50	OECD 201	4.36 mg/l	73 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; GLP
	NOEC	OECD 201	0.44 mg/l	73 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; GLP
Long-term toxicity fish	NOEC		> 1.3 mg/l	56 day(s)	Oncorhynchus mykiss	Flow-through system	Fresh water	Read-across; Lethal
Long-term toxicity aquatic crustacea	NOEC	EPA 600/4-91-003	0.96 mg/l	7 day(s)	Ceriodaphnia dubia	Daily renewal	Fresh water	Read-across; Reproduction
Toxicity aquatic micro-organisms	EC50	OECD 209	> 157 mg/l	3 h	Activated sludge	Static system	Fresh water	Read-across; GLP

## hydrocarbons, C9, aromatics

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LL50	OECD 203	9.2 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EL50	OECD 202	3.2 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EL50	OECD 201	2.9 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
	NOELR	OECD 201	1 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	QSAR; GLP
Long-term toxicity fish	NOELR		1.228 mg/l	28 day(s)	Oncorhynchus mykiss		Fresh water	QSAR
Long-term toxicity aquatic crustacea	NOELR		2.144 mg/l	21 day(s)	Daphnia magna		Fresh water	QSAR

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## n-butyl acetate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	18 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	EC50		44 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	EC50		674.7 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	OECD 211	23 mg/l	21 day(s)	Daphnia magna		Fresh water	Read-across; Reproduction
Toxicity aquatic micro-organisms	IC50		356 mg/l	40 h	Tetrahymena pyriformis	Static system	Fresh water	Experimental value; Nominal concentration

## aluminium powder

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		6.17 mg/l	96 h	Oncorhynchus mykiss	Flow-through system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	EC50	EPA 600/4-85/013	0.72 mg/l	48 h	Ceriodaphnia dubia	Semi-static system	Fresh water	Experimental value; Lethal
Toxicity algae and other aquatic plants	EC10	OECD 201	0.153 mg/l	72 h	Pseudokirchneriella subcapitata	Semi-static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC	OECD 210	71.5 µg/l	33 day(s)	Danio rerio	Flow-through system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	OECD 211	76 µg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction

## **Conclusion**

Harmful to aquatic life with long lasting effects.

## **12.2. Persistence and degradability**

### acetone

#### **Biodegradation water**

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	90.9 %	28 day(s)	Experimental value

### ethyl acetate

#### **Biodegradation water**

Method	Value	Duration	Value determination
OECD 301B: CO2 Evolution Test	93.9 %	28 day(s)	Experimental value
OECD 301D: Closed Bottle Test	100 %	28 day(s)	Experimental value

#### **Phototransformation air (DT50 air)**

Method	Value	Conc. OH-radicals	Value determination
	40 h	500000 /cm <sup>3</sup>	QSAR

### xylene

#### **Biodegradation water**

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	98 %; GLP	28 day(s)	Experimental value

#### **Phototransformation air (DT50 air)**

Method	Value	Conc. OH-radicals	Value determination
	23.2 h	500000 /cm <sup>3</sup>	Read-across

#### **Biodegradation soil**

Method	Value	Duration	Value determination
Equivalent or similar to OECD 304A	50 %	23 day(s)	Experimental value

### hydrocarbons, C9, aromatics

#### **Biodegradation water**

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	78 %	28 day(s)	Experimental value

# ALU 1000 AEROSOL

n-butyl acetate

## Biodegradation water

Method	Value	Duration	Value determination
OECD 301D: Closed Bottle Test	83 %; Oxygen consumption	28 day(s)	Experimental value

## Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	3.3 day(s)	500000 /cm <sup>3</sup>	Experimental value

## Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
Other	2 year(s); pH = 7	Primary degradation	Calculated value

## Conclusion

Does not contain any not readily biodegradable component(s)

## 12.3. Bioaccumulative potential

ALU 1000 AEROSOL

### Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

acetone

### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		0.69		Pisces	

### BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF	BCFWIN	3			Calculated value

### Log Kow

Method	Remark	Value	Temperature	Value determination
		-0.24		Test data

ethyl acetate

### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		30	3 day(s)	Leuciscus idus	Experimental value

### Log Kow

Method	Remark	Value	Temperature	Value determination
EPA OPPTS 830.7560		0.68	25 °C	Experimental value

xylene

### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		25.9	56 day(s)	Oncorhynchus mykiss	Read-across

### Log Kow

Method	Remark	Value	Temperature	Value determination
		3.12 - 3.2	20 °C	Read-across

hydrocarbons, C9, aromatics

### Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

n-butyl acetate

### BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		14		Pisces	Literature study

### Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		2.3	25 °C	Experimental value

aluminium powder

### Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

## Conclusion

No straightforward conclusion can be drawn based upon the available numerical values

## 12.4. Mobility in soil

# ALU 1000 AEROSOL

ethyl acetate

## Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	51.3 %	0 %	0.27 %	13.3 %	35.3 %	Calculated value

xylene

## (log) Koc

Parameter	Method	Value	Value determination
log Koc	Equivalent to OECD 121	2.73	Read-across

n-butyl acetate

## (log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.268 - 1.844	QSAR

## Volatility (Henry's Law constant H)

Value	Method	Temperature	Remark	Value determination
28.5 Pa.m <sup>3</sup> /mol		25 °C		Experimental value

## Conclusion

Contains component(s) with potential for mobility in the soil

## 12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

## 12.6. Other adverse effects

### ALU 1000 AEROSOL

#### Fluorinated greenhouse gases (Regulation (EU) No 517/2014)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

#### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

ethyl acetate

#### Groundwater

Groundwater pollutant

hydrocarbons, C9, aromatics

#### Groundwater

Groundwater pollutant

n-butyl acetate

#### Groundwater

Groundwater pollutant

## SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 13.1. Waste treatment methods

#### 13.1.1 Provisions relating to waste

##### European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 01 11\* (wastes from MFSU and removal of paint and varnish: waste paint and varnish containing organic solvents or other hazardous substances).

16 05 04\* (gases in pressure containers and discarded chemicals: gases in pressure containers (including halons) containing hazardous substances).

Depending on branch of industry and production process, also other waste codes may be applicable.

#### 13.1.2 Disposal methods

Recycle/reuse. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste.

Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Specific treatment. Do not discharge into drains or the environment.

#### 13.1.3 Packaging/Container

##### European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

## SECTION 14: Transport information

### Road (ADR)

#### 14.1. UN number

UN number	1950
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#### 14.2. UN proper shipping name

Proper shipping name	Aerosols
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#### 14.3. Transport hazard class(es)

Reason for revision: 2.2

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# ALU 1000 AEROSOL

Hazard identification number	
Class	2
Classification code	5F
<b>14.4. Packing group</b>	
Packing group	
Labels	2.1
<b>14.5. Environmental hazards</b>	
Environmentally hazardous substance mark	no
<b>14.6. Special precautions for user</b>	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

## Rail (RID)

<b>14.1. UN number</b>	
UN number	1950
<b>14.2. UN proper shipping name</b>	
Proper shipping name	Aerosols
<b>14.3. Transport hazard class(es)</b>	
Hazard identification number	23
Class	2
Classification code	5F
<b>14.4. Packing group</b>	
Packing group	
Labels	2.1
<b>14.5. Environmental hazards</b>	
Environmentally hazardous substance mark	no
<b>14.6. Special precautions for user</b>	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

## Inland waterways (ADN)

<b>14.1. UN number</b>	
UN number	1950
<b>14.2. UN proper shipping name</b>	
Proper shipping name	Aerosols
<b>14.3. Transport hazard class(es)</b>	
Class	2
Classification code	5F
<b>14.4. Packing group</b>	
Packing group	
Labels	2.1
<b>14.5. Environmental hazards</b>	
Environmentally hazardous substance mark	no
<b>14.6. Special precautions for user</b>	
Special provisions	190
Special provisions	327
Special provisions	344
Special provisions	625
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)

## Sea (IMDG/IMSBC)

<b>14.1. UN number</b>	
UN number	1950
<b>14.2. UN proper shipping name</b>	
Proper shipping name	aerosols
<b>14.3. Transport hazard class(es)</b>	
Class	2.1
<b>14.4. Packing group</b>	
Packing group	
Labels	2.1
<b>14.5. Environmental hazards</b>	
Marine pollutant	-

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# ALU 1000 AEROSOL

Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	190
Special provisions	277
Special provisions	327
Special provisions	344
Special provisions	381
Special provisions	63
Special provisions	959
Limited quantities	Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass)
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	
Annex II of MARPOL 73/78	Not applicable

## Air (ICAO-TI/IATA-DGR)

14.1. UN number	
UN number	1950
14.2. UN proper shipping name	
Proper shipping name	Aerosols, flammable
14.3. Transport hazard class(es)	
Class	2.1
14.4. Packing group	
Packing group	
Labels	2.1
14.5. Environmental hazards	
Environmentally hazardous substance mark	no
14.6. Special precautions for user	
Special provisions	A145
Special provisions	A167
Special provisions	A802
Passenger and cargo transport	
Limited quantities: maximum net quantity per packaging	30 kg G

## SECTION 15: Regulatory information

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

#### European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
86.4 %	
648 g/l	

VOC content Directive 2004/42/EC

Maximum value	EC limit value	Category	Subcategory	Notation
648 g/l	840 g/l	IIB	e: Special finishes	2004/42/IIB(e)(840)648

Indicative occupational exposure limit values (Directive 98/24/EC, 2000/39/EC and 2009/161/EU)

Product name	Skin resorption
Xylene, mixed isomers, pure	Skin

European drinking water standards (Directive 98/83/EC)

aluminium powder

Parameter	Parametric value	Note	Reference
Aluminium	200 µg/l		Listed in Annex I, Part C, of Directive 98/83/EC on the quality of water intended for human consumption.

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
<ul style="list-style-type: none"> <li>· acetone</li> <li>· ethyl acetate</li> <li>· xylene</li> <li>· hydrocarbons, C9, aromatics</li> <li>· n-butyl acetate</li> </ul>	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1;	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and — present an aspiration hazard and are labelled with H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059)

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	(d) hazard class 5.1.	<p>adopted by the European Committee for Standardisation (CEN).</p> <p>5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:</p> <p>a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage";</p> <p>b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage";</p> <p>c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.</p> <p>6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled H304, intended for supply to the general public.</p> <p>7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'</p>
<ul style="list-style-type: none"> <li>· acetone</li> <li>· ethyl acetate</li> <li>· xylene</li> <li>· hydrocarbons, C9, aromatics</li> <li>· n-butyl acetate</li> <li>· aluminium powder</li> </ul>	<p>Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.</p>	<p>1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:</p> <ul style="list-style-type: none"> <li>— metallic glitter intended mainly for decoration,</li> <li>— artificial snow and frost,</li> <li>— "whoopee" cushions,</li> <li>— silly string aerosols,</li> <li>— imitation excrement,</li> <li>— horns for parties,</li> <li>— decorative flakes and foams,</li> <li>— artificial cobwebs,</li> <li>— stink bombs.</li> </ul> <p>2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:</p> <p>"For professional users only".</p> <p>3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC.</p> <p>4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.</p>

## National legislation Belgium

### ALU 1000 AEROSOL

No data available

#### xylene

Résorption peau	Xylène, isomères mixtes, purs; D; La mention "D" signifie que la résorption de l'agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l'exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l'agent dans l'air.
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## National legislation The Netherlands

### ALU 1000 AEROSOL

Waterbezwaarlijkheid	Z (2); Algemene Beoordelingsmethodiek (ABM)
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#### xylene

Huidopname (wettelijk)	Xyleen (o-,m- en p-isomeren); H
SZW - Lijst van voor de voortplanting giftige stoffen (ontwikkeling)	xyleen; 2; Suspected of damaging the unborn child.

## National legislation France

### ALU 1000 AEROSOL

No data available

#### xylene

Risque de pénétration percutanée	Xylènes, isomères mixtes, purs; PP
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## National legislation Germany

### ALU 1000 AEROSOL

WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
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#### acetone

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Aceton; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

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## ethyl acetate

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Ethylacetat; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

## xylene

TA-Luft	5.2.5/I
Hautresorptive Stoffe	Xylol (alle Isomeren); H; Hautresorptiv

## n-butyl acetate

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	n-Butylacetat; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

## aluminium powder

TA-Luft	5.2.1
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### National legislation United Kingdom

#### ALU 1000 AEROSOL

No data available

#### xylene

Skin absorption	Xylene, o-,m-,p- or mixed isomers; Sk
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### Other relevant data

#### ALU 1000 AEROSOL

No data available

#### acetone

TLV - Carcinogen	Acetone; A4
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#### xylene

TLV - Carcinogen	Xylene (all isomers); A4
IARC - classification	3; Xylenes

#### aluminium powder

TLV - Carcinogen	Aluminium, Metal; A4
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## 15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

## SECTION 16: Other information

### Full text of any H-statements referred to under heading 3:

- H220 Extremely flammable gas.
- H222 Extremely flammable aerosol.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H228 Flammable solid.
- H229 Pressurised container: May burst if heated.
- H261 In contact with water releases flammable gases.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs (central nervous system, liver, kidneys) through prolonged or repeated exposure if swallowed.
- H373 May cause damage to organs (central nervous system, liver, kidneys) through prolonged or repeated exposure if inhaled.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

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The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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