according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

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

1.1 Product identifier

Trade name : LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM

- 400 ML

Product code : 0893399006

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

Use of the Sub- : Paint

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : Adolf Wuerth GmbH & Co. KG

Reinhold-Würth-Str. 12-17

74653 Künzelsau

Telephone : +49 794015 0

Telefax : +49 794015 10 00

E-mail address of person

responsible for the SDS

: prodsafe@wuerth.com

1.4 Emergency telephone number

Giftnotrufzentrale Berlin +49 30 30686 790. Gesellschaft (07:00 – 18:00 Uhr) +49 794015

2552

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1 H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

Specific target organ toxicity - single ex-

posure, Category 3

H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:**

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.

P261 Avoid breathing spray.

P271 Use only outdoors or in a well-ventilated area.

Storage:

P410 + P412 Protect from sunlight. Do not expose to tem-

peratures exceeding 50 °C/ 122 °F.

Hazardous components which must be listed on the label:

Dimethyl ether

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Xylene	1330-20-7 215-535-7 601-022-00-9 01-2119488216-32	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 STOT RE 2; H373 Asp. Tox. 1; H304	>= 1 - < 10
Ethylbenzene	100-41-4 202-849-4 601-023-00-4	Flam. Liq. 2; H225 Acute Tox. 4; H332 STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412	>= 1 - < 2,5
Substances with a workplace exposure limit :			
Dimethyl ether	115-10-6 204-065-8 603-019-00-8	Flam. Gas 1; H220 Press. Gas Liquefied gas; H280	>= 30 - < 50

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

01-2119472128-37 STOT SE 3; H336

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment

when the potential for exposure exists.

If inhaled : If inhaled, remove to fresh air.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes.

Get medical attention.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : Flush eyes with water as a precaution.

Get medical attention if irritation develops and persists.

If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Flash back possible over considerable distance.
 Vapours may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health. If the temperature rises there is danger of the vessels bursting

due to the high vapor pressure.

Hazardous combustion prod: :

ucts

Carbon oxides

Nitrogen oxides (NOx)

Metal oxides Sulphur oxides

5.3 Advice for firefighters

Special protective equipment :

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Remove all sources of ignition.

Use personal protective equipment.

Follow safe handling advice and personal protective equip-

ment recommendations.

6.2 Environmental precautions

Environmental precautions : Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g. by containment or oil

barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Non-sparking tools should be used.

Soak up with inert absorbent material.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.

Use only in an area equipped with explosion proof exhaust

ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not breathe vapours or spray mist.

Do not swallow.

Avoid contact with eyes.

Handle in accordance with good industrial hygiene and safety

practice.

Keep away from heat and sources of ignition.

Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the

environment.

Do not spray on an open flame or other ignition source.

Hygiene measures : Ensure that eye flushing systems and safety showers are

located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Store locked up. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Do not pierce or burn, even after use. Keep cool. Protect from sun-

light.

Advice on common storage : Do not store with the following product types:

Self-reactive substances and mixtures

Organic peroxides Oxidizing agents Flammable solids

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

Pyrophoric liquids Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures, which in contact with water, emit

flammable gases

Explosives

Storage class (TRGS 510) : 2B, Aerosol cans and lighters

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Dimethyl ether	115-10-6	TWA	1.000 ppm 1.920 mg/m3	2000/39/EC
Further information	Indicative			
		AGW	1.000 ppm 1.900 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	8;(II)			
Further information	for the health	(MAK-commission).,	of compounds at the work p European Union (The EU hand Europeak limit are possible)	
n-Butyl acetate	123-86-4	AGW	62 ppm 300 mg/m3	DE TRGS 900
Peak-limit: excur- sion factor (catego- ry)	2;(I)		· ·	
Further information		Commission for dangerous substances, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn		
Barium sulfate	7727-43-7	AGW (Inhalable fraction)	10 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)			
Further information	General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values., Commission for dangerous substances, Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
		AGW (Alveolate fraction)	1,25 mg/m3	DE TRGS 900

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

Peak-limit: excursion factor (category)	2;(II)			
Further information	General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values.,			
			ances, Senate commission for gerous for the health (MAK-o	
Aluminium	7429-90-5	AGW (Inhalable fraction)	10 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)			
Further information	value is estab unspecific act Commission f	lished, since the AG ion on the respirator for dangerous substa	ance no specific occupationa S does not yet have informa y organs in excess of the no ances, Senate commission fo gerous for the health (MAK-o	tion regarding rmal values., or the review of
		AGW (Alveolate fraction)	1,25 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)			
Further information	General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values., Commission for dangerous substances, Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
Xylene	1330-20-7	TWA	50 ppm 221 mg/m3	2000/39/EC
Further information	Identifies the	possibility of significa	ant uptake through the skin, I	ndicative
		STEL	100 ppm 442 mg/m3	2000/39/EC
Further information	Identifies the		ant uptake through the skin, I	
		AGW	100 ppm 440 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., European Union (The EU has established a limit value: deviations in value and peak limit are possible), Skin absorption			
Ethylbenzene	100-41-4	TWA	100 ppm 442 mg/m3	2000/39/EC
Further information	Identifies the	possibility of significa	ant uptake through the skin, I	ndicative
		STEL	200 ppm 884 mg/m3	2000/39/EC
Further information	Identifies the	possibility of significa	ant uptake through the skin, I	ndicative
		AGW	20 ppm 88 mg/m3	DE TRGS 900
Peak-limit: excur-	2;(II)	•	· · ·	•

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

sion factor (catego- ry)				
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., European Union (The EU has established a limit value: deviations in value and peak limit are possible), Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
		AGW	200 mg/m3	DE TRGS 900
Peak-limit: excur- sion factor (catego- ry)	2;(II)			
Further information		•	oon solvent mixtures, Commi 2.9 of the TRGS 900	ssion for dan-

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Formaldehyde	50-00-0	AGW	0,3 ppm 0,37 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	2;(I)			
Further information	Carcinogenic substance of category 1A/1B. When using this substance, § 10 of the 'Gefahrstoffverordnung' should be taken into account., Commission for dangerous substances, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child, Substance sensitizing through the skin			
Methanol	67-56-1	TWA	200 ppm 260 mg/m3	2006/15/EC
Further information	Indicative, Ide	ntifies the possibility	of significant uptake through	the skin
		AGW	200 ppm 270 mg/m3	DE TRGS 900
Peak-limit: excursion factor (category)	4;(II)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., European Union (The EU has established a limit value: deviations in value and peak limit are possible), Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

Biological occupational exposure limits

	-			
Substance name	CAS-No.	Control parameters	Sampling time	Basis
Xylene	1330-20-7	xylene: 1,5 mg/l	Immediately after	TRGS 903
		(Blood)	exposure or after	
			working hours	
		methylhippuric acid	Immediately after	TRGS 903
		(all isomers): 2 g/l	exposure or after	
		(Urine)	working hours	
Ethylbenzene	100-41-4	mandelic acid +	Immediately after	TRGS 903

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

phenylglyoxylic exposure or after acid: 300 mg/l working hours (Urine)

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

	, ,	<u> </u>	` '	
Substance name	End Use	Exposure routes	Potential health effects	Value
Xylene	Workers	Inhalation	Acute systemic ef- fects	289 mg/m3
	Workers	Inhalation	Acute local effects	289 mg/m3
	Workers	Skin contact	Long-term systemic effects	180 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	77 mg/m3
	Consumers	Inhalation	Acute systemic effects	174 mg/m3
	Consumers	Inhalation	Acute local effects	174 mg/m3
	Consumers	Skin contact	Long-term systemic effects	108 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	14,8 mg/m3
	Consumers	Ingestion	Long-term systemic effects	1,6 mg/kg bw/day
Ethylbenzene	Workers	Inhalation	Acute local effects	293 mg/m3
	Workers	Skin contact	Long-term systemic effects	180 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	77 mg/m3
	Consumers	Inhalation	Long-term systemic effects	15 mg/m3
	Consumers	Ingestion	Long-term systemic effects	1,6 mg/kg bw/day
n-Butyl acetate	Workers	Inhalation	Acute systemic effects	600 mg/m3
	Workers	Inhalation	Acute local effects	600 mg/m3
	Workers	Inhalation	Long-term systemic effects	300 mg/m3
	Workers	Inhalation	Long-term local ef- fects	300 mg/m3
	Consumers	Inhalation	Acute systemic effects	300 mg/m3
	Consumers	Inhalation	Acute local effects	300 mg/m3
	Consumers	Inhalation	Long-term systemic effects	35,7 mg/m3
	Consumers	Inhalation	Long-term local ef- fects	35,7 mg/m3
	Consumers	Skin contact	Long-term systemic effects	11 mg/kg bw/day
	Consumers	Skin contact	Acute systemic ef- fects	11 mg/kg bw/day
	Consumers	Skin contact	Long-term systemic effects	6 mg/kg bw/day

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

	Consumers	Skin contact	Acute systemic effects	6 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	2 mg/kg bw/day
	Consumers	Ingestion	Acute systemic effects	2 mg/kg bw/day
Dimethyl ether	Workers	Inhalation	Long-term systemic effects	1894 mg/m3
	Consumers	Inhalation	Long-term systemic effects	471 mg/m3
Barium sulfate	Workers	Inhalation	Long-term local ef- fects	10 mg/m3
	Workers	Inhalation	Long-term systemic effects	10 mg/m3
	Consumers	Inhalation	Long-term systemic effects	10 mg/m3
	Consumers	Ingestion	Long-term systemic effects	13000 mg/kg bw/day
Aluminium	Workers	Inhalation	Long-term local ef- fects	3,72 mg/m3
	Consumers	Ingestion	Long-term systemic effects	3,95 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Xylene	Fresh water	0,327 mg/l
	Marine water	0,327 mg/l
	Intermittent use/release	0,327 mg/l
	Sewage treatment plant	6,58 mg/l
	Fresh water sediment	12,46 mg/kg
	Marine sediment	12,46 mg/kg
	Soil	2,31 mg/kg
Ethylbenzene	Fresh water	0,1 mg/l
	Marine water	0,01 mg/l
	Intermittent use/release	0,1 mg/l
	Sewage treatment plant	9,6 mg/l
	Fresh water sediment	13,7 mg/kg
	Soil	2,68 mg/kg
	Oral (Secondary Poisoning)	0,02 mg/kg food
n-Butyl acetate	Fresh water	0,18 mg/l
	Marine water	0,018 mg/l
	Sewage treatment plant	35,6 mg/l
	Fresh water sediment	0,981 mg/kg dry weight (d.w.)
	Marine sediment	0,098 mg/kg dry weight (d.w.)
	Soil	0,09 mg/kg dry weight (d.w.)
Dimethyl ether	Fresh water	0,155 mg/l
-	Marine water	0,016 mg/l
	Intermittent use/release	1,549 mg/l

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

	Sewage treatment plant	160 mg/l
	Fresh water sediment	0,681 mg/kg
	Marine sediment	0,069 mg/kg
	Soil	0,045 mg/kg
Barium sulfate	Fresh water	227,8 mg/l
	Sewage treatment plant	50,1 mg/l
	Soil	707,7 mg/kg
	Fresh water sediment	792,7 mg/kg
Aluminium	Sewage treatment plant	20 mg/l

8.2 Exposure controls

Engineering measures

Processing may form hazardous compounds (see section 10).

Minimize workplace exposure concentrations.

Use only in an area equipped with explosion proof exhaust ventilation.

Use with local exhaust ventilation.

Personal protective equipment

Eye protection : Wear the following personal protective equipment:

Safety glasses

Hand protection

Material : Nitrile rubber
Break through time : > 30 min
Glove thickness : 0,4 mm
Directive : DIN EN 374

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Wear the following personal protective equipment: Flame retardant antistatic protective clothing.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Self-contained breathing apparatus

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : aerosol

Propellant : Dimethyl ether

Colour : white, silver

Odour : aromatic

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling

range

-24 °C

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : Extremely flammable aerosol.

Upper explosion limit / Upper

flammability limit

18,6 %(V)

Lower explosion limit / Lower

flammability limit

1,1 %(V)

Vapour pressure : 5.200 hPa (20 °C)

Relative vapour density : Not applicable

Density : 0,8 g/cm3 (20 °C)

Solubility(ies)

Water solubility : immiscible, partly miscible

Partition coefficient: n-

octanol/water

: Not applicable

Auto-ignition temperature : 235 °C

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : No data available

Flow time : 20 s at 20 °C

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

Method: DIN 53211 (CF4)

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other information

Particle size : No data available

Self-ignition : not auto-flammable

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Extremely flammable aerosol.

Vapours may form explosive mixture with air.

If the temperature rises there is danger of the vessels bursting

due to the high vapor pressure.

Can react with strong oxidizing agents.

Hazardous decomposition products will be formed at elevated

temperatures.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Thermal decomposition : Formaldehyde

Methanol

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of:

exposure

Inhalation Skin contact

Ingestion Eye contact

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

Acute toxicity

Not classified based on available information.

Product:

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Components:

Xylene:

Acute oral toxicity : LD50 (Rat): 4.300 mg/kg

Method: Directive 67/548/EEC, Annex V, B.1.

Acute inhalation toxicity : LC50 (Rat): 27,5 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Acute toxicity estimate: 11 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Expert judgement

Remarks: Based on harmonised classification in EU regulation

1272/2008, Annex VI

Acute dermal toxicity : Acute toxicity estimate: 1.100 mg/kg

Method: Expert judgement

Remarks: Based on harmonised classification in EU regulation

1272/2008, Annex VI

Ethylbenzene:

Acute oral toxicity : LD50 (Rat): 3.500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 17,2 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Dimethyl ether:

Acute inhalation toxicity : LC50 (Rat): 164000 ppm

Exposure time: 4 h
Test atmosphere: gas

Skin corrosion/irritation

Not classified based on available information.

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

Components:

Xylene:

Species: Rabbit Result: Skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Xylene:

Species: Rabbit

Result: Irritation to eyes, reversing within 7 days

Ethylbenzene:

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Xylene:

Test Type: Local lymph node assay (LLNA)

Exposure routes: Skin contact

Species: Mouse

Method: OECD Test Guideline 429

Result: negative

Ethylbenzene:

Test Type: Human repeat insult patch test (HRIPT)

Exposure routes: Skin contact

Result: negative

Germ cell mutagenicity

Not classified based on available information.

Components:

Xylene:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: In vitro sister chromatid exchange assay in mam-

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

malian cells Result: negative

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Mouse

Application Route: Skin contact

Result: negative

Ethylbenzene:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: Unscheduled DNA synthesis (UDS) test with

mammalian liver cells in vivo

Species: Mouse

Application Route: Inhalation Method: OECD Test Guideline 486

Result: negative

Dimethyl ether:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Sex-linked recessive lethal test in Drosophila mel-

anogaster (in vivo)

Application Route: inhalation (gas) Method: OECD Test Guideline 477

Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Xylene:

Species: Rat

Application Route: Ingestion Exposure time: 103 weeks

Result: negative

Ethylbenzene:

Species: Rat

Application Route: Inhalation Exposure time: 104 weeks

Result: positive

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

Remarks: The mechanism or mode of action may not be relevant in humans.

Dimethyl ether:

Species: Rat

Application Route: inhalation (vapour)

Exposure time: 2 Years

Method: OECD Test Guideline 453

Result: negative

Reproductive toxicity

Not classified based on available information.

Components:

Xylene:

Effects on fertility : Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapour)

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: inhalation (vapour)

Result: negative

Ethylbenzene:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapour) Method: OECD Test Guideline 415

Result: negative

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: Inhalation Method: OECD Test Guideline 414

Result: negative

Dimethyl ether:

Effects on foetal develop-

ment

Test Type: Embryo-foetal development

Species: Rat

Application Route: inhalation (vapour) Method: OECD Test Guideline 414

Result: negative

STOT - single exposure

May cause drowsiness or dizziness.

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

Components:

Xylene:

Assessment: May cause respiratory irritation.

Dimethyl ether:

Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Components:

Xylene:

Exposure routes: inhalation (vapour)

Target Organs: Central nervous system, Liver, Kidney

Assessment: Shown to produce significant health effects in animals at concentrations of >0.2 to

1 mg/l/6h/d.

Ethylbenzene:

Exposure routes: inhalation (vapour) Target Organs: Auditory system

Assessment: Shown to produce significant health effects in animals at concentrations of >0.2 to

1 mg/l/6h/d.

Repeated dose toxicity

Components:

Xylene:

Species: Rat NOAEL: 4,35 mg/l

Application Route: inhalation (vapour)

Exposure time: 90 Days

Ethylbenzene:

Species: Rat, female LOAEL: 75 ppm

Application Route: inhalation (vapour)

Exposure time: 104 Weeks

Aspiration toxicity

Not classified based on available information.

Components:

Xylene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

Ethylbenzene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Xylene:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 2,6 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

IC50 (Daphnia magna (Water flea)): 1 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

EC10 (Pseudokirchneriella subcapitata (green algae)): 1,9 Toxicity to algae

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

ErC50 (Pseudokirchneriella subcapitata (green algae)): 4,36

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

EC50 : > 157 mg/lToxicity to microorganisms

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOEC: > 1.3 mg/lExposure time: 56 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

EC10: 1,91 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

Ethylbenzene:

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 4,2 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1,8 - 2,4 mg/l

Exposure time: 48 h

Toxicity to algae EC50 (Pseudokirchneriella subcapitata (green algae)): 5,4

mg/l

Exposure time: 72 h

Toxicity to microorganisms EC50 (Nitrosomonas sp.): 96 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 209

Toxicity to daphnia and other : aquatic invertebrates (Chron-

NOEC: 0,96 mg/l Exposure time: 7 d

ic toxicity) Species: Ceriodaphnia dubia (water flea)

Dimethyl ether:

Toxicity to fish LC50 (Poecilia reticulata (guppy)): > 4,1 g/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 4,4 g/l

Exposure time: 48 h

EC10 (Pseudomonas putida): > 1.600 mg/l Toxicity to microorganisms

12.2 Persistence and degradability

Components:

Xylene:

Biodegradability Result: Readily biodegradable.

Biodegradation: 87,8 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Remarks: Based on data from similar materials

Ethylbenzene:

Biodegradability Result: Readily biodegradable.

Biodegradation: 70 - 80 % Exposure time: 28 d

Dimethyl ether:

Biodegradability Result: Not readily biodegradable.

Biodegradation: 5 % Exposure time: 28 d

Method: OECD Test Guideline 301D

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

12.3 Bioaccumulative potential

Components:

Xylene:

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)

Bioconcentration factor (BCF): 5,4 - 25,9

Partition coefficient: n-

octanol/water

log Pow: 3,12 - 3,2

Ethylbenzene:

Bioaccumulation : Species: Fish

Bioconcentration factor (BCF): < 100

Remarks: Based on data from similar materials

Partition coefficient: n-

octanol/water

log Pow: 3,6

Dimethyl ether:

Partition coefficient: n-

octanol/water

log Pow: 0,2

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product. Please ensure aerosol cans are sprayed completely empty

(including propellant)

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

Waste Code : The following Waste Codes are only suggestions:

used product

160504, gases in pressure containers (including halons) con-

taining dangerous substances

080111, waste paint and varnish containing organic solvents

or other dangerous substances

unused product

160504, gases in pressure containers (including halons) con-

taining dangerous substances

080111, waste paint and varnish containing organic solvents

or other dangerous substances

uncleaned packagings

150110, packaging containing residues of or contaminated by

dangerous substances

Acc. Packaging Ordinance properly emptied packaging: Properly emptied, non-contaminated packaging of nonhazardous products can be supplied to a system for the col-

lection of sales packaging.

SECTION 14: Transport information

14.1 UN number

ADN : UN 1950
ADR : UN 1950
RID : UN 1950
IMDG : UN 1950
IATA : UN 1950

14.2 UN proper shipping name

ADN : AEROSOLS
ADR : AEROSOLS
RID : AEROSOLS
IMDG : AEROSOLS

IATA : Aerosols, flammable

14.3 Transport hazard class(es)

 ADN
 : 2

 ADR
 : 2

 RID
 : 2

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

IMDG : 2.1 IATA : 2.1

14.4 Packing group

ADN

Packing group : Not assigned by regulation

Classification Code : 5F Labels : 2.1

ADR

Packing group : Not assigned by regulation

Classification Code : 5F Labels : 2.1 Tunnel restriction code : (D)

RID

Packing group : Not assigned by regulation

Classification Code : 5F Hazard Identification Number : 23 Labels : 2.1

IMDG

Packing group : Not assigned by regulation

Labels : 2.1

EmS Code : F-D, S-U

IATA (Cargo)

Packing instruction (cargo : 203

aircraft)

Packing instruction (LQ) : Y203

Packing group : Not assigned by regulation

Labels : Flammable Gas

IATA (Passenger)

Packing instruction (passen- : 203

ger aircraft)

Packing instruction (LQ) : Y203

Packing group : Not assigned by regulation

Labels : Flammable Gas

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

Not applicable

according to Regulation (EC) No. 1907/2006



Quantity 2

500 t

LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

REACH - Candidate List of Substances of Very High : Not applicable

Concern for Authorisation (Article 59).

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Regulation (EC) No 850/2004 on persistent organic pol-

lutants

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

Not applicable

Not applicable

Not applicable

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Quantity 1

FLAMMABLE AEROSOLS 150 t

Water contaminating class

(Germany)

P3a

WGK 2 water endangering

Classification according VwVwS, Annex 4.

Volatile organic compounds : Directive 2004/42/EC

VOC content in q/I: 669 q/I

Product sub-category: Special finishes

Coatings: All types

VOC limit level 1 (2007): 840 g/l

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 85 %, 669 g/l

Remarks: VOC content excluding water

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

Version Revision Date: SDS Number: Date of last issue: 23.05.2017 4.1 27.06.2017 919656-00005 Date of first issue: 04.10.2016

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Full text of H-Statements

H220 : Extremely flammable gas.

H225 : Highly flammable liquid and vapour. H226 : Flammable liquid and vapour.

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 through prolonged or repeated

exposure.

H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Chronic aquatic toxicity
Asp. Tox. : Aspiration hazard
Eye Irrit. : Eye irritation
Flam. Gas : Flammable gases
Flam. Liq. : Flammable liquids
Press. Gas : Gases under pressure

Skin Irrit. : Skin irritation

STOT RE : Specific target organ toxicity - repeated exposure STOT SE : Specific target organ toxicity - single exposure

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

2006/15/EC : Europe. Indicative occupational exposure limit values
DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

TRGS 903 : TRGS 903 - Biological limit values

2000/39/EC / TWA: Limit Value - eight hours2000/39/EC / STEL: Short term exposure limit2006/15/EC / TWA: Limit Value - eight hoursDE TRGS 900 / AGW: Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -

according to Regulation (EC) No. 1907/2006



LACQUER SPRAY QUATTRO RAL 9006 WHITEALUMINIUM - 400 ML

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.05.2017

 4.1
 27.06.2017
 919656-00005
 Date of first issue: 04.10.2016

Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to compile the Safety Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Classification of the mixture:

Classification procedure:

Aerosol 1 H222, H229 Based on product data or assessment STOT SE 3 Calculation method

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

DE / EN