Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1



SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name

Alu-Chrom-Spray (82115)

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

Relevant identified uses

Paint.

Uses advised against

No information.

1.3. Details of the supplier of the safety data sheet

Supplier

plus6 Werkzeuge GmbH & Co.KG Gewerbepark 9 DE-06917 Jessen Tel.+49(0)3877/95747-60 Ulrike Steinke www.plus6.de / info@plus6.de

1.4. Emergency telephone number

Giftnotruf Berlin +49 (0) 30/30686 700

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Aerosol 1; H222 Extremely flammable aerosol.

Aerosol 1; H229 Pressurised container: May burst if heated.

Asp. Tox. 1; H304 May be fatal if swallowed and enters airways.

Skin Irrit. 2; H315 Causes skin irritation.

Eye Irrit. 2; H319 Causes serious eye irritation.

STOT SE 3; H335 May cause respiratory irritation.

STOT SE 3; H336 May cause drowsiness or dizziness.

STOT RE 2; H373 May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

Print date: 8.10.2020 Page 1 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

2.2 Label elements

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









Signal word: Danger

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

P102 Keep out of reach of children.

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.

P273 Avoid release to the environment.

P301 + P310 + P331 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Do NOT induce vomiting.

P302 + P352 + P364 F ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice/attention if you feel unwell.

P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F.

P501 Dispose of contents/container in accordance with national regulation.

2.2.2. Contains:

hydrocarbons, C9, aromatics (CAS: 64742-95-6, EC: 918-668-5) reaction mass of ethylbenzene, m-xylene and p-xylene (EC: 905-562-9) xylene (CAS: 1330-20-7, EC: 215-535-7, Index: 601-022-00-9) ethylbenzene (CAS: 100-41-4, EC: 202-849-4, Index: 601-023-00-4)

2.2.3. Special provisions

Special hazards are not known or expected.

2.3. Other hazards

No information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product description

Hydrocarbons with a propellant.

3.1. Substances

For mixtures see 3.2.

3.2. Mixtures

Print date: 8.10.2020 Page 2 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: $\mathbf{24.4.2019} \cdot \text{Revision: } \mathbf{7.4.2020} \cdot \text{Version: } \mathbf{1}$

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
isobutane [C, S]	75-28-5 200-857-2 601-004-00-0	25-50	Flam. Gas 1; H220 Press. Gas; H280		01-2119485395-27
hydrocarbons, C9, aromatics	64742-95-6 918-668-5 -	10-50	Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H335 STOT SE 3; H336 Aquatic Chronic 2; H411		01-2119455851-35
acetone	67-64-1 200-662-2 606-001-00-8	<25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066		01-2119471330-49
propane ^[U]	74-98-6 200-827-9 601-003-00-5	10-25	Flam. Gas 1; H220 Press. Gas; H280		01-2119486944-21
reaction mass of ethylbenzene, m- xylene and p-xylene	- 905-562-9 -	<10	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 STOT RE 2; H373		01-2119555267-33
xylene ^[C]	1330-20-7 215-535-7 601-022-00-9	<10	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 STOT RE 2; H373 Aquatic Chronic 3; H412		01-2119488216-32
aromatic hydrocarbons, C8	- 905-570-2 -	<10	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Acute Tox. 4; H332		01-2119486136-34
xylene ^[C]	1330-20-7 215-535-7 601-022-00-9	<10	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 STOT RE 2; H373		-
ethylbenzene	100-41-4 202-849-4 601-023-00-4	<2,5	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Acute Tox. 4; H332 STOT RE 2; H373 (hearing organs)		-
di-n-butylamine	111-92-2 203-921-8 612-049-00-0	<0,2	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 3; H311 Skin Corr. 1A; H314 Eye Dam. 1; H318 Acute Tox. 2; H330		01-2119475606-30

Print date: 8.10.2020 Page 3 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

Notes for substances:

C Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers.

In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

S This substance may not require a label according to Article 17 (see Section 1.3 of Annex I) (Table 3).

When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned:

Press. Gas (Comp.) Press. Gas (Liq.)

Press. Gas (Ref. Liq.)

Press. Gas (Diss.)

Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency.

No action shall be taken involving any personal risk or without suitable training.

Following inhalation

If symptoms occur, seek medical advice. Remove patient to fresh air - move out of dangerous area. Keep at rest in a position comfortable for breathing. Obtain professional medical help! If breathing is irregular or respiratory arrest occurs provide artificial respiration. Seek medical help immediately. In case of unconsciousness bring patient into stable side position and seek medical attention.

Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water and soap. If symptoms develop and persist, seek medical attention. Wash contaminated clothes and shoes before reuse.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

Following ingestion

Not likely. Accidental ingestion: Do not induce vomiting! Immediately consult a doctor. Show the physician the safety data sheet or label.

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

Inhalation

Vapours may cause drowsiness and dizziness.

Can cause irritation of respiratory system.

Coughing, sneezing, nasal discharge, labored breathing.

Skin contact

Irritating to the skin. Itching, redness, pain.

Eye contact

Strongly irritates the eyes.

Redness, tearing, pain.

Print date: 8.10.2020 Page 4 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

Ingestion

Ingestion is unlikely because it is an aerosol.

Accidental ingestion:

May cause abdominal discomfort.

May cause nausea/vomiting and diarrhea.

Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area.

May be fatal if swallowed and enters airways.

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

Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Foam.

Carbon dioxide (CO₂).

Fire extinguishing powder.

Water spray. Extinguish large fires with water spray or alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO $_2$).

5.3. Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours. In case of fire aerosols can explode and be propelled to considerable distances in different directions. Cool containers at risk with water spray. If possible remove containers from endangered area. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for firefighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

<u>Additional information</u>

Contaminated extinguishing agents must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Emergency procedures

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking! No action shall be taken involving any personal risk or without suitable training. Prevent access to unauthorised personnel. Prevent access to unprotected personnel. Avoid contact with skin and eyes. Do not breathe vapour or mist.

Print date: 8.10.2020 Page 5 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

6.1.2. For emergency responders

Use personal protective equipment.

6.2. Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

Stem the spill if this does not pose risks.

6.3.2. For cleaning up

Collect the spray cans and hand them over to an authorized waste disposal contractor. Release of liquid because of damaged aerosol can (release of large quantities): In case of bigger spill, dam the spillage, pump the liquid into appropriate labelled containers, absorb a residue with absorbent material and dispose of according to local regulations. Do not absorb spillage with sawdust or other combustible material. Dispose in accordance with applicable regulations (see Section 13). Clean residue from spill site.

6.3.3. Other information

-

6.4. Reference to other sections

See also Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Protective measures

Measures to prevent fire

Ensure adequate ventilation. Take precautionary measures against static discharges. Keep away from sources of ignition - no smoking. Use spark-proof tools. Pressurized container; protect from sunlight and do not expose to tempratures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or incandescent material.

Measures to prevent aerosol and dust generation

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

Measures to protect the environment

Avoid release to the environment.

7.1.2. Advice on general occupational hygiene

Consider measures required in Section 8 of this safety data sheet. Use personal protective equipment. Refer to instructions on label and regulations for safety and health at work. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/mist.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Technical measures and storage conditions

Store in accordance with local regulations. Keep in well closed containers. Keep in cool and well ventilated area. Protect from open fire, heat and direct sunlight. Keep away from sources of ignition. Keep away from oxidising substances. Keep away from food, drink and animal feeding stuffs.

7.2.2. Packaging materials

The original container of producer.

7.2.3. Requirements for storage rooms and vessels

Do not store in unlabelled containers.

7.2.4. Storage class

-

Print date: 8.10.2020 Page 6 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

7.2.5. Further information on storage conditions

-

7.3. Specific end use(s)

Recommendations

-

Industrial sector specific solutions

-

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational exposure limit values

Name (CAS)			Short-term exposure limit		Remarks	Biological Tolerance Values		
	ml/m ³ (ppm)	mg/m ³	ml/m ³ (ppm)	mg/m ³				
Aluminium metal inhalable dust (7429-90-5)		10						
Aluminium metal respirable dust (7429-90-5)		4						
Acetone (67-64-1)	500	1210	1500	3620				
Xylene, o-,m-,p- or mixed isomers (1330-20-7)	50	220	100	441	Sk, BMGV	650 mmol methyl hippuric acid/mol creatinine in urine - Post shift		
Ethylbenzene (100-41-4)	100	441	125	552	Sk			
Aluminium salts, soluble (-)		2						
Aluminium alkyl compounds (-)		2						

8.1.2. Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2012+A1:2015 Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values.

Print date: 8.10.2020 Page 7 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

8.1.3. DNEL/DMEL values

For components

Name	Туре	Exposure route	Exposure frequency	Value	Remark
hydrocarbons, C9, aromatics (64742-95-6)	Worker	inhalation	long term (systemic effects)	150 mg/m ³	
hydrocarbons, C9, aromatics (64742-95-6)	Worker	dermal	long term (systemic effects)	25 mg/kg bw/day	
hydrocarbons, C9, aromatics (64742-95-6)	Consumer	inhalation	long term (systemic effects)	32 mg/m ³	
hydrocarbons, C9, aromatics (64742-95-6)	Consumer	dermal	long term (systemic effects)	11 mg/kg bw/day	
hydrocarbons, C9, aromatics (64742-95-6)	Consumer	oral	long term (systemic effects)	11 mg/kg bw/day	
acetone (67-64-1)	Worker	dermal	long term (systemic effects)	186 mg/kg bw/day	
acetone (67-64-1)	Worker	inhalation	short term (local effects)	2420 mg/m ³	
acetone (67-64-1)	Worker	inhalation	long term (systemic effects)	1210 mg/m ³	
acetone (67-64-1)	Consumer	oral	long term (systemic effects)	62 mg/kg bw/day	
acetone (67-64-1)	Consumer	dermal	long term (systemic effects)	62 mg/kg bw/day	
acetone (67-64-1)	Consumer	inhalation	long term (systemic effects)	200 mg/m ³	

8.1.4. PNEC values

For components

Name	Exposure route	Value	Remark
acetone (67-64-1)	marine water	1,06 mg/L	
acetone (67-64-1)	fresh water	10,6 mg/L	
acetone (67-64-1)	fresh water sediment	30,4 mg/kg	dry weight
acetone (67-64-1)	marine water sediment	3,04 mg/kg	dry weight
acetone (67-64-1)	soil	29,5 mg/kg	dry weight
acetone (67-64-1)	water treatment plant	100 mg/L	
acetone (67-64-1)	water, intermittent release	21 mg/L	fresh water

8.2. Exposure controls

8.2.1. Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/aerosols. Keep away from foodstuffs, beverages and feed. Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation.

Organisational measures to prevent exposure

If this product contains ingredients with exposure limits, personal, workplace atmosphere monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protection.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

Print date: 8.10.2020 Page 8 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

8.2.2. Personal protective equipment

Eye and face protection

Safety glasses with side protection (EN 166).

Hand protection

Protective gloves (EN 374).

Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. If the concentration limit values are exceeded, it is necessary to wear appropriate respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).

Thermal hazards

-

8.2.3. Environmental exposure controls

Technical measures to prevent exposure

Prevent exposure in the environment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

-	Physical state:	liquid; aerosol
-	Colour:	silver
-	Odour:	

Important health, safety and environmental information

-	рН	No information.
-	Melting point/freezing point	No information.
-	Initial boiling point/boiling range	No information.
-	Flash point	No information.
-	Evaporation rate	No information.
-	Flammability (solid, gas)	No information.
-	Explosion limits (vol%)	1,5 – 10,9 vol % (propellant) 2,1 – 13 vol % (acetone)
-	Vapour pressure	3 hPa at 20 °C (SOLVESSO 100)
-	Vapour density	No information.
-	Density	Density : 0,898 kg/L at 20 °C (data refers to the liquid portion of the product)
-	Solubility	No information.
-	Partition coefficient	No information.
-	Auto-ignition temperature	No information.
-	Decomposition temperature	No information.
-	Viscosity	No information.
-	Explosive properties	No information.
-	Oxidising properties	No information.

Print date: 8.10.2020 Page 9 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

9.2. Other information

-	Weight organic solvents	629 g/l (VOC) 89 % (VOC)
-	Remarks:	

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended transport or storage conditions.

10.2. Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3. Possibility of hazardous reactions

The product is stable under recommended storage and handling conditions.

10.4. Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not expose to heat and direct sunlight.

10.5. Incompatible materials

Strong acids.

Oxidants.

Peroxide. Strong reducing agents. Halogenated compounds. Alkali metal. Ethanolamine. Hydrogen peroxide. Attacks many plastics and rubbers.

10.6. Hazardous decomposition products

In case of fire/explosion vapours/gases that pose a health hazard are released.

Print date: 8.10.2020 Page 10 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

(a) Acute toxicity

Name	Exposure route	Туре	Species	Time	Value	Method	Remark
hydrocarbons, C9, aromatics (64742- 95-6)	oral	LD ₅₀	rat		3492 mg/kg		
hydrocarbons, C9, aromatics (64742- 95-6)	dermal	LD ₅₀	rabbit		> 3160 mg/kg		
acetone (67-64-1)	inhalation	LC ₅₀	rat	4 h	76 mg/l		
acetone (67-64-1)	dermal	LD ₅₀	rabbit		> 15800 mg/kg		
acetone (67-64-1)	oral	LD ₅₀	rat		5800 mg/kg	OECD 401	
xylene (1330-20-7)	oral	LD ₅₀			2000 – 5000 mg/kg		
xylene (1330-20-7)	inhalation	LC ₅₀			10 – 20 mg/l		
aromatic hydrocarbons, C8 (-)	oral	LD ₅₀	rat		3523 mg/kg		
aromatic hydrocarbons, C8 (-)	inhalation	-					Harmful if inhaled.
aromatic hydrocarbons, C8 (-)	dermal	-					Harmful in contact with skin.
xylene (1330-20-7)	dermal	ATE			1100 mg/kg		
xylene (1330-20-7)	dermal	-					Harmful in contact with skin.
xylene (1330-20-7)	inhalation	-					Harmful if inhaled.
di-n-butylamine (111-92-2)	oral	ATE			500 mg/kg		

(b) Skin corrosion/irritation

Name	Species	Time	Result	Method	Remark			
hydrocarbons, C9, aromatics (64742-95-6)			Skin degreasing.					
hydrocarbons, C9, aromatics (64742-95-6)			Prolonged and repeated contact can cause dermatitis.					
acetone (67-64-1)	guinea pig		Non-irritant.					
Additional information: Causes skin irritation.								

(c) Serious eye damage/irritation

Name	Species	Time	Result	Method	Remark
hydrocarbons, C9, aromatics (64742-95-6)			May cause irritation.		
acetone (67-64-1)	rabbit		Irritating to eyes.	OECD 405	
acetone (67-64-1)	rabbit		Irritates the eyes. The occurrence of corneal injuries is possible.	OECD 405	
xylene (1330-20-7)			Irritating to eyes.		
Additional information: Causes serior	us eye irrita	ation.			

Print date: 8.10.2020 Page 11 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: $\mathbf{24.4.2019} \cdot \text{Revision: } \mathbf{7.4.2020} \cdot \text{Version: } \mathbf{1}$

(d) Respiratory or skin sensitisation

Name	Exposure route	Species	Time	Result	Method	Remark			
hydrocarbons, C9, aromatics (64742-95-6)	-			It does not cause sensitization on laboratory animals.					
acetone (67-64-1)	-	guinea pig		Non sensitising.	OECD 406				
Additional information: The product is not classified as sensitising.									

(e) (Germ cell) mutagenicity

Name	Туре	Species	Time	Result	Method	Remark
hydrocarbons, C9, aromatics (64742-95-6)		germ cells		Negative.		
acetone (67-64-1)		Bacteria		The tests did not show mutagenic effects		
acetone (67-64-1)		Cell: Mammalian- Animal		The tests did not show mutagenic effects		
acetone (67-64-1)	in-vitro mutagenicity			Negative.	OECD 473	Chromosome aberration assay
acetone (67-64-1)	in-vitro mutagenicity	Cell: Mammalian- Animal		Negative.	OECD 476	
acetone (67-64-1)	in-vitro mutagenicity	Bacteria		Negative.	OECD 471	
acetone (67-64-1)	in-vivo mutagenicity	mouse		Negative.	The micronucleus test	
xylene (1330-20-7)				Not mutagenic.		
aromatic hydrocarbons, C8 (-)	in-vivo mutagenicity			Negative.		
aromatic hydrocarbons, C8 (-)	in-vitro mutagenicity			Negative.		

(f) Carcinogenicity

Name	Exposure route	Туре	Species	Time	Value	Result	Method	Remark
hydrocarbons, C9, aromatics (64742-95-6)						Not carcinogenic.		
acetone (67-64-1)						Animal testing did not show any carcinogenic effects.		
acetone (67-64-1)	dermal		mouse			negative		
xylene (1330-20-7)						Limited evidence of carcinogenicity in animal studies.		
aromatic hydrocarbons, C8 (-)						Substance is not classified as carcinogenic.		

Print date: 8.10.2020 Page 12 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: $\mathbf{24.4.2019} \cdot \text{Revision: } \mathbf{7.4.2020} \cdot \text{Version: } \mathbf{1}$

(g) Reproductive toxicity

Name	Reproductive toxicity type	Туре	Species	Time	Value	Result	Method	Remark
hydrocarbons, C9, aromatics (64742-95-6)	Teratogenicity					No teratogenic effects to be expected.		
hydrocarbons, C9, aromatics (64742-95-6)	Reproductive toxicity					Not toxic for reproduction.		
acetone (67-64-1)	Reproductive toxicity					Animal testing did not show any effects on fertility.		
acetone (67-64-1)	Teratogenicity		rat			Negative.	OECD 414	
xylene (1330-20-7)	Teratogenicity	-				not teratogenic		
xylene (1330-20-7)	Reproductive toxicity					Not toxic for reproduction.		
aromatic hydrocarbons, C8 (-)	Reproductive toxicity					Animal testing did not show any effects on fertility.		

Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

(h) STOT-single exposure

Exposure route	Туре	Species	Time	Organ	Value	Result	Method	Remark
inhalation	-					May cause drowsiness or dizziness.		
inhalation	-					May cause respiratory irritation.		
-	-					May cause drowsiness or dizziness.		
inhalation	-					May cause respiratory irritation.		
inhalation	-					May cause respiratory irritation.		
oral	-					May cause irritation of the digestive tract.		
oral	-					May cause nausea/vomiting and diarrhea		
inhalation	-					May cause respiratory irritation.		high vapours concentrations
inhalation	-					May cause respiratory irritation.		
	route inhalation inhalation inhalation oral oral inhalation	route inhalation - inhalation - inhalation - inhalation - oral - oral - inhalation -	route inhalation - inhalation - inhalation - inhalation - oral - oral - inhalation -	route inhalation - inhalation - inhalation - inhalation - oral - oral - inhalation -	route inhalation - inhalation - inhalation - inhalation - oral - oral - inhalation -	route inhalation - inhalation - inhalation - inhalation - inhalation - oral - inhalation - inhalation -	route inhalation - May cause drowsiness or dizziness. inhalation - May cause respiratory irritation. - May cause drowsiness or dizziness. inhalation - May cause drowsiness or dizziness. inhalation - May cause respiratory irritation. inhalation - May cause respiratory irritation. oral - May cause irritation of the digestive tract. oral - May cause nausea/vomiting and diarrhea inhalation - May cause respiratory irritation.	route inhalation - May cause drowsiness or dizziness. inhalation - May cause respiratory irritation. - May cause drowsiness or dizziness. inhalation - May cause respiratory irritation. inhalation - May cause respiratory irritation. inhalation - May cause respiratory irritation. oral - May cause irritation of the digestive tract. oral - May cause nausea/vomiting and diarrhea inhalation - May cause respiratory irritation.

Print date: 8.10.2020 Page 13 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: $\mathbf{24.4.2019} \cdot \text{Revision: } \mathbf{7.4.2020} \cdot \text{Version: } \mathbf{1}$

(i) STOT-repeated exposure

Name	Exposure route	Туре	Species	Time	Organ	Value	Result	Method	Remark
hydrocarbons, C9, aromatics (64742-95-6)	-	-					Not classified.		
acetone (67-64-1)	dermal	-					Repeated exposure may cause dry and cracked skin.		
	Repeated dose toxicity	NOAEL	rat	90 days	oral	900 mg/kg bw/day			
	Repeated dose toxicity	NOAEC	rat			22500 mg/m ³			inhalation
acetone (67-64-1)	inhalation	-	human				Headache, dizziness, fatigue, nausea and vomiting.		excessive exposure to vapors
acetone (67-64-1)	dermal	-	human				Repeated or prolonged exposure may cause dermatitis.		
acetone (67-64-1)	inhalation	-	human		Nasal inner lining		Symptoms: inflammation of the mucous membranes.		
reaction mass of ethylbenzene, m-xylene and p-xylene (-)	-	-					May cause damage to organs through prolonged or repeated exposure.		
xylene (1330-20-7)	-	-					May cause damage to organs through prolonged or repeated exposure.		
xylene (1330-20-7)	-	-					May cause damage to organs through prolonged or repeated exposure.		

(j) Aspiration hazard

Name	Result	Method	Remark				
hydrocarbons, C9, aromatics (64742-95-6)	May be fatal if swallowed and enters airways.						
xylene (1330-20-7) May be fatal if swallowed and enters airways.							
Additional information: May be fatal if swallowed and	d enters airways.						

Print date: 8.10.2020 Page 14 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: $\mathbf{24.4.2019} \cdot \text{Revision: } \mathbf{7.4.2020} \cdot \text{Version: } \mathbf{1}$

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Acute (short-term) toxicity

For components

Substance (CAS Nr.)	Туре	Value	Exposure time	Species	Organism	Method	Remark
hydrocarbons, C9, aromatics (64742-95-6)	LL50	9,2 mg/L	96 h	fish	Oncorhynchus mykiss		Test conducted on a similar product.
	EL ₅₀	3,2 mg/L	48 h	crustacea	Daphnia magna		Test conducted on a similar product.
	ErL ₅₀	2,9 mg/L	72 h	algae	Pseudokirchneriella subcapitata		Test conducted on a similar product.
	NOELR	1 mg/L	72 h	algae	Pseudokirchneriella subcapitata		
	EL ₅₀	2,6 – 2,9 mg/L	72 h	algae	Pseudokirchneriella subcapitata	Petrotox (v3.04)	
acetone (67-64-1)	LC ₅₀	5540 mg/L	96 h	fish	Oncorhynchus mykiss		
	LC ₅₀	11000 mg/L	96 h	fish	Alburnus alburnus		
	LC ₅₀	8800 mg/L	48 h	crustacea	Daphnia magna		
	NOEC	430 mg/L	96 h	algae			
	-	1000 mg/L	30 min	bacteria	Activated sludge	OECD 209	
reaction mass of ethylbenzene, m- xylene and p-xylene (-)	LC ₅₀	> 1,3 mg/L		fish			
xylene (1330-20-7)	IC ₅₀	2,2 mg/L	72 h	algae			
	EC ₅₀	1 mg/L	48 h	aquatic invertebrates	Daphnia magna		
	LC ₅₀	26,7 mg/L	96 h	fish	Pimephales promelas		
	LC ₅₀	16,9 mg/L	96 h	fish	Carassius auratus		
	LC ₅₀	20,9 mg/L	96 h	fish	Lepomis macrochirus		
	LC ₅₀	34,7 mg/L	96 h	fish	Poecilia reticulata		
aromatic hydrocarbons, C8 (-)	LC ₅₀	2,6 mg/L	96 h	fish			
	EC ₅₀	1 mg/L	48 h	aquatic invertebrates	Daphnia magna		
	LC ₅₀	2,2 mg/L	72 h	algae			

Print date: 8.10.2020 Page 15 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

12.1.2. Chronic (long-term) toxicity

For components

Substance (CAS Nr.)	Туре	Value	Exposure time	Species	Organism	Method	Remark
acetone (67-64-1)	NOEC	2212 mg/l	28 days	crustacea	Daphnia pulex		reproduction
xylene (1330-20-7)	NOEC	> 1,3 mg/l	56 days	fish			
	NOEC	0,96 mg/l	7 days	aquatic invertebrates	Daphnia		

12.2. Persistence and degradability

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

For components

Substance (CAS Nr.)	Environment	Type / Method	Half Time	Evaluation	Method	Remark
acetone (67-64-1)	water			Degraded by hydrolysis.		
xylene (1330-20-7)	Air	photodegradation		In the air it is quickly oxidized by photochemical reaction.		

12.2.2. Biodegradation

For components

Substance (CAS Nr.)	Туре	Rate	Time	Evaluation	Method	Remark
hydrocarbons, C9, aromatics (64742-95-6)	biodegradability	78 %	28 days	readily biodegradable		fresh water
acetone (67-64-1)	biodegradability	91 %	28 days	readily biodegradable	OECD 301 B	
acetone (67-64-1)	BOD	1900 mg/g	5 days			
acetone (67-64-1)	COD	2100 mg/g				
reaction mass of ethylbenzene, m-xylene and p-xylene (-)	BOD	57 – 80 g O ₂ /g				
xylene (1330-20-7)	biodegradability			readily biodegradable		
aromatic hydrocarbons, C8 (-)	aerobic			inherently biodegradable		
aromatic hydrocarbons, C8 (-)	anaerobic			biodegradable		

12.3. Bioaccumulative potential

12.3.1. Partition coefficient

For components

Substance (CAS Nr.)	Media	Value	Temperature	рН	Concentration	Method
acetone (67-64-1)	Log Pow	-0,24				
aromatic hydrocarbons, C8 (-)	Log Pow	> 3				
xylene (1330-20-7)	Log Pow	3,1 - 3,2				
di-n-butylamine (111-92-2)	Log Pow	2,06	25 °C			

12.3.2. Bioconcentration factor (BCF)

For components

Substance (CAS Nr.)	species	Organism	Value	Duration	Evaluation	Method	Remark
acetone (67-64-1)	BCF		< 10				
xylene (1330-20-7)	BCF		25,9		Low bioaccumulation potential.		
aromatic hydrocarbons, C8 (-)	BCF		25,9				

Print date: 8.10.2020 Page 16 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

12.4. Mobility in soil

12.4.1. Known or predicted distribution to environmental compartments

For components

Substance (CAS Nr.)	Air	Water	Soil	Sediment	(Aquatic) Biota	Method	Remark
xylene (1330-20-7)							Low mobility in the soil.

12.4.2. Surface tension

No information.

12.4.3. Adsorption/Desorption

No information.

12.5. Results of PBT and vPvB assessment

No evaluation.

12.6. Other adverse effects

No information.

12.7. Additional information

For product

Toxic to aquatic life with long lasting effects.

Water hazard class (WGK): 3 (Self-assessment), very hazardous for water.

Avoid release to the environment.

For components

Substance: hydrocarbons, C9, aromatics

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The substance is highly volatile.

Not expected to adsorb on soil.

Substance: acetone

Does not bioaccumulate.

The substance is highly volatile.

This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

Avoid release to the environment.

Substance: reaction mass of ethylbenzene, m-xylene and p-xylene

Bioaccumulation is not expected.

Very mobile in soil.

Substance: xylene

Evaporates quickly.

Partly soluble in water.

Floating on the water.

It absorbs into soil.

Do not allow to reach ground water, water bodies or sewage systems.

Substance: aromatic hydrocarbons, C8

Air: Evaporates quickly. Not soluble in water. Floating on the water.

ribating on the water.

Print date: 8.10.2020 Page 17 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

13.1.1. Product / Packaging disposal

Waste chemical

Avoid release to the environment. Product and container must be disposed of safely. Dispose of in accordance with applicable waste disposal regulation. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Waste codes / waste designations according to LoW

16 05 04* - gases in pressure containers (including halons) containing dangerous substances

Packaging

Uncleaned containers should not be perforated, cut or welded. Pressurized container. Do not pierce or burn, even after use. Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities.

Waste codes / waste designations according to LoW

15 01 11* - metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

13.1.2. Waste treatment-relevant information

-

13.1.3. Sewage disposal-relevant information

-

13.1.4. Other disposal recommendations

-

SECTION 14. TRANSPORT INFORMATION

14.1. UN number

UN 1950

14.2. UN proper shipping name

AEROSOLS

IMDG name: AEROSOLS (hydrocarbons, C9, aromatics)

14.3. Transport hazard class(es)

2

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Additional labeling: ENVIRONMENTALLY HAZARDOUS

IMDG: MARINE POLLUTANT

14.6. Special precautions for user

Limited quantities

1 L

Tunnel restriction code

(D)

Print date: 8.10.2020



Page 18 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

IMDG EmS

F-D, S-U

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

Goods may not be carried in bulk in bulk containers, containers or vehicles.

SECTION 15. REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 - Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2015/830)
 - Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-quideline)

Not applicable.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. OTHER INFORMATION

Indication of changes

-

Abbreviations and acronyms

ATE - Acute Toxicity Estimate

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CEN - European Committee for Standardisation

C&L - Classification and Labelling

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

CAS# - Chemical Abstracts Service number

CMR - Carcinogen, Mutagen, or Reproductive Toxicant

CSA - Chemical Safety Assessment

CSR - Chemical Safety Report

DMEL - Derived Minimal Effect Level

DNEL - Derived No Effect Level

DPD - Dangerous Preparations Directive 1999/45/EC

DSD - Dangerous Substances Directive 67/548/EEC

DU - Downstream User

EC - European Community

ECHA - European Chemicals Agency

EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)

EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)

EEC - European Economic Community

EINECS - European Inventory of Existing Commercial Substances

ELINCS - European List of notified Chemical Substances

EN - European Standard

EQS - Environmental Quality Standard

EU - European Union

Euphrac - European Phrase Catalogue

EWC - European Waste Catalogue (replaced by LoW - see below)

GES - Generic Exposure Scenario

GHS - Globally Harmonized System

IATA - International Air Transport Association

ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG - International Maritime Dangerous Goods

Print date: 8.10.2020 Page 19 of 21

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

IMSBC - International Maritime Solid Bulk Cargoes

IT - Information Technology

IUCLID - International Uniform Chemical Information Database

IUPAC - International Union for Pure Applied Chemistry

JRC - Joint Research Centre

Kow - octanol-water partition coefficient

LC₅₀ - Lethal Concentration to 50 % of a test population

LD₅₀ - Lethal Dose to 50% of a test population (Median Lethal Dose)

LE - Legal Entity

LoW - List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm)

LR - Lead Registrant

M/I - Manufacturer / Importer

MS - Member States

MSDS - Material Safety Data Sheet

OC - Operational Conditions

OECD - Organization for Economic Co-operation and Development

OEL - Occupational Exposure Limit

OJ - Official Journal

OR - Only Representative

OSHA - European Agency for Safety and Health at work

PBT - Persistent, Bioaccumulative and Toxic substance

PEC - Predicted Effect Concentration

PNEC(s) - Predicted No Effect Concentration(s)

PPE - Personal Protection Equipment

(Q)SAR - Qualitative Structure Activity Relationship

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

RIP - REACH Implementation Project

RMM - Risk Management Measure

SCBA - Self-Contained Breathing Apparatus

SDS - Safety data sheet

SIEF - Substance Information Exchange Forum

SME - Small and Medium sized Enterprises

STOT - Specific Target Organ Toxicity

(STOT) RE - Repeated Exposure

(STOT) SE - Single Exposure

SVHC - Substances of Very High Concern

UN - United Nations

vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data

_

Product name: Alu-Chrom-Spray (82115)

Creation date: 24.4.2019 · Revision: 7.4.2020 · Version: 1

List of relevant H phrases

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eve damage.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

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.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.

Print date: 8.10.2020 Page 21 of 21