Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 Revision: 21.11.2016

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

For professional use only

· **1.1 Product identifier** For professional use only

· **Trade name: Acrythane SC601 Colours (contains lead)**
· **1.2 Relevant identified uses of the substance or mixture and uses advised against** Surface Coating
· **Application of the substance / the mixture**
Surface Coating
Use of the substance/preparation: Restricted to industrial and professional coatings, plastics and roadmarking.
Description of Uses for Pigment Yellow 34 CAS No. 1344-37-2:
REACH/16/3/0: Distribution and mixing of pigment powder in an industrial environment into solvent-based paints for non-consumer use. REACH/16/3/1: Industrial application of paints on metal surfaces (such as machines vehicles, structures, signs, road furniture, coil coatng, etc.) REACH/16/3/2: Professional, non-consumer application of paints on metal surfaces (such as machines, vehicles, structures, signs, road, furniture, etc.) or as road marking.
Use of the substance/preparation: Restricted to industrial and professional coatings, plastics and roadmarking.
Description of Uses for Pigment Red 104 Cas No 12656-85-8:
REACH/16/3/6: Distribution and mixing of pigment powder in an industrial environment into solvent-based paints for non-consumer use. REACH/16/3/7: Industrial application of paints on metal surfaces (such as machines vehicles, structures, signs, road furniture, coil coating, etc.) REACH/16/3/8: Professional, non-consumer application of paints on metal surfaces (such as machines, vehicles, structures, signs, road furniture, etc.) or as road marking.
· **Uses advised against**
This product must not be used for decorative coatings, children's articles (including toys, paints, jewellery & equipment), consumer products, printing inks for consumer products, food and food packaging, drugs and medical devices, ceramics and glassware, cosmetics and tattoos.
Formulation of the pigment in paint, plastic and plasticised articles for children/consumer use. The use of the pigment is restricted in Annex XVII of REACH, entries 28 and 30.

· **1.3 Details of the supplier of the safety data sheet**
· **Supplier:**
HMG PAINTS LIMITED
RIVERSIDE WORKS, COLLYHURST ROAD,
MANCHESTER. M40 7RU
UNITED KINGDOM
TEL: +44 (0)161 205 7631
EMAIL: sales@hmgpaint.com

· **Further information obtainable from:** sales@hmgpaint.com
· **1.4 Emergency telephone number:** +44 (0)161 205 7631 (Business hours)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 1)

GHS08 health hazard

Resp. Sens. 1	*H334*	*May cause allergy or asthma symptoms or breathing difficulties if inhaled.*
Carc. 1B	*H350*	*May cause cancer.*
Repr. 1A	*H360Df*	*May damage the unborn child. Suspected of damaging fertility.*

GHS09 environment

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

GHS07

Skin Irrit. 2	*H315*	*Causes skin irritation.*
Skin Sens. 1	*H317*	*May cause an allergic skin reaction.*

· ***Additional information:***
Contains: C.I. Pigment Yellow 34 Restricted to Professional and Industrial Users. Authorisation number: REACH/16/3/0, REACH/16/3/1, REACH/16/3/2
Contains: C.I. Pigment Red 104 Restricted to Professional and Industrial Users. Authorisation number: REACH/16/3/6, REACH/16/3/7, REACH/16/3/8

· ***2.2 Label elements***
· ***Labelling according to Regulation (EC) No 1272/2008***
The product is classified and labelled according to the CLP regulation.
· ***Hazard pictograms*** *GHS02, GHS08, GHS09*
· ***Signal word*** *Danger*

· ***Hazard-determining components of labelling:***
Lead sulphochromate yellow (PY34)
Lead chromate molybdate sulphate (PR104)
· ***Hazard statements***
Flammable liquid and vapour.
Causes skin irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause cancer.
May damage the unborn child. Suspected of damaging fertility.
Toxic to aquatic life with long lasting effects.
· ***Precautionary statements***
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
[In case of inadequate ventilation] wear respiratory protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· ***Additional information:***
Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.
Contains chromium (VI). May produce an allergic reaction.
· ***2.3 Other hazards***
· ***Results of PBT and vPvB assessment***
· ***PBT:*** *Not applicable.*
· ***vPvB:*** *Not applicable.*

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 2)

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226	2.5-10%
CAS: 1344-37-2 EINECS: 215-693-7	Lead sulphochromate yellow (PY34) Resp. Sens. 1, H334; Carc. 1B, H350; Repr. 1A, H360Df; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	2.5-10%
CAS: 12656-85-8 EINECS: 235-759-9	Lead chromate molybdate sulphate (PR104) Resp. Sens. 1, H334; Carc. 1B, H350; Repr. 1A, H360Df; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1, H317	2.5-10%
CAS: 123-86-4 EINECS: 204-658-1	Butyl ethanoate Flam. Liq. 3, H226; STOT SE 3, H336	2.5-10%
CAS: 1330-20-7 EINECS: 215-535-7	Xylene (mix) Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 3, H412	2.5-10%
CAS: 90989-38-1 EINECS: 292-694-9	Xylene (mixed isomers) Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	2.5-10%
CAS: 64742-95-6 EC number: 918-668-5	Solvent naphtha (petroleum), light arom. Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336	≤ 2.5%
	Polyurethane Skin Irrit. 2, H315	≤ 2.5%

· **SVHC**

1344-37-2	Lead sulphochromate yellow (PY34)
12656-85-8	Lead chromate molybdate sulphate (PR104)

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:**
Supply fresh air and call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing.
Immediately rinse with water.
· **After eye contact:** Rinse opened eye for several minutes under running water.
· **After swallowing:**
Do not induce vomiting; call for medical help immediately and show safety datasheet or label.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
Treat symptomatically.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 Revision: 21.11.2016

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 3)

Treatment: The presence of lead in the body can be detected by determining the amount of this substance in the blood and/or urine.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** *Water with full jet*
· **5.2 Special hazards arising from the substance or mixture**
Reactivity: May be dissolved in strong acids or alkalis. In the event of a fire, oxides of lead, chromium and antimony may be generated.
· **5.3 Advice for firefighters**
· **Protective equipment:** *Put on breathing apparatus*

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
Ensure good ventilation/extraction at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
Hygiene measures:
Wash hands before breaks and at the end of workday.
Use protective skin cream before handling the product.
· **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** *No special requirements.*
· **Information about storage in one common storage facility:** *Not required.*
· **Further information about storage conditions:**
Keep receptacle tightly sealed and in a well-ventilated place.
Keep away from heat.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 4)

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

108-65-6 2-methoxy-1-methylethyl acetate

WEL	Short-term value: 548 mg/m³, 100 ppm Long-term value: 274 mg/m³, 50 ppm Sk

123-86-4 Butyl ethanoate

WEL	Short-term value: 966 mg/m³, 200 ppm Long-term value: 724 mg/m³, 150 ppm

1330-20-7 Xylene (mix)

WEL	Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV

64742-95-6 Solvent naphtha (petroleum), light arom.

OEL	Long-term value: 100 mg/m³

· **DNELs**

108-65-6 2-methoxy-1-methylethyl acetate

Oral	DNEL	1.67 mg/day (Con)
Dermal	DNEL	54.8 mg/day (Con)
		153.5 mg/day (Ind)
Inhalative	DNEL	33 mg/m³ (Con)
		275 mg/m³ (Ind)

12656-85-8 Lead chromate molybdate sulphate (PR104)

Inhalative	DNEL	0.006 mg/m³ (Human)

123-86-4 Butyl ethanoate

Oral	DNEL	2 mg/day (Con)
Dermal	DNEL	6 mg/day (Con)
		11 mg/day (Ind)
Inhalative	DNEL	35.7 mg/m³ (Con)
		300 mg/m³ (Ind)

1330-20-7 Xylene (mix)

Dermal	DNEL	108 mg/day (Con)
		180 mg/day (Ind)
Inhalative	DNEL	14.8 mg/m³ (Con)
		77 mg/m³ (Ind)

90989-38-1 Xylene (mixed isomers)

Oral	DNEL	1.6 mg/day (Con)
Dermal	DNEL	108 mg/day (Con)
Inhalative	DNEL	14.8 mg/m³ (Con)
		77 mg/m³ (Ind)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	DNEL	11 mg/day (Con)

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 5)

Dermal	DNEL	11 mg/day (Con)
		25 mg/day (Ind)
Inhalative	DNEL	32 mg/m³ (Con)
		150 mg/m³ (Ind)

· ***PNECs***
CAS No. 1330-20-7 Xylene mixed isomers
- Fresh water; 0.327 mg/l
- Marine water; 0.327 mg/l
- Intermittent release; 0.327 mg/l
- STP; 6.58 mg/l
- Sediment (Freshwater); 12.46 mg/kg
- Sediment (Marinewater); 12.46 mg/kg
- Soil; 2.31 mg/kg
CAS No 1344-37-2 Lead Sulphochromate & CAS No 12656-85-8 Lead chromate molybdate sulphate.
PNEC (Water)
PNEC aqua (freshwater) 0.1 mg/l
PNEC aqua (marine water) 0.01 mg/l PNEC (Sediment)
PNEC sediment (freshwater) 148 mg/kg dwt Chromate
PNEC sediment (marine water) 14.8 mg/kg dwt Chromate PNEC (Soil)
PNEC soil 29.5 mg/kg dwt Chromate PNEC (STP)
PNEC sewage treatment plant1000 mg/l
CAS No. 123-86-4 Butyl Acetate
Freshwater: 0.18 mg/l
Marine water: 0.018 mg/l
Fresh water sediment: 0.981 mg/kg
Marine sediment: 0.0981 mg/kg
Soil: 0.0903 mg/kg
STP (sewage-treatment plant): 35.6 mg/l
Intermittent use/release: 0.36 mg/l

· ***Ingredients with biological limit values:***	
1330-20-7 Xylene (mix)	
BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid

· ***Additional information:*** *The lists valid during the making were used as basis.*

· ***8.2 Exposure controls***
· ***Personal protective equipment:***
· ***General protective and hygienic measures:***
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
· ***Respiratory protection:***
When spraying the product, use a respiratory protective device.
If spraying this product, an ABEK respirator to EN141 and EN405 is normally suficient. If in doubt, consult a respirator manufacturer and show this safety data sheet.
· ***Protection of hands:***
When skin exposure may occur, advice should be sought from the glove supplier on appropriate types and usage times for this product.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 6)

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· ***Material of gloves***
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· ***Penetration time of glove material***
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· ***Eye protection:***

Tightly sealed goggles

SECTION 9: Physical and chemical properties

· ***9.1 Information on basic physical and chemical properties***	
· ***General Information***	
· ***Appearance:***	
Form:	*Liquid*
Colour:	*According to product specification*
· ***Odour:***	*Characteristic*
· ***Odour threshold:***	*Not determined.*
· ***pH-value:***	*Not determined.*
· ***Change in condition***	
Melting point/Melting range:	*Undetermined.*
Boiling point/Boiling range:	*124 °C*
· ***Flash point:***	*25 °C*
· ***Flammability (solid, gaseous):***	*Not applicable.*
· ***Ignition temperature:***	*315 °C*
· ***Decomposition temperature:***	*Not determined.*
· ***Self-igniting:***	*Product is not selfigniting.*
· ***Danger of explosion:***	*Product is not explosive. However, formation of explosive air/vapour mixtures are possible.*
· ***Explosion limits:***	
Lower:	*1.1 Vol %*
Upper:	*7.0 Vol %*
· ***Vapour pressure at 20 °C:***	*6.7 hPa*
· ***Density at 20 °C:***	*1.162 g/cm³*
· ***Relative density***	*Not determined.*
· ***Vapour density***	*Not determined.*
· ***Evaporation rate***	*Not determined.*

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 7)

· **Solubility in / Miscibility with water:**	NOT MISCIBLE
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic at 20 °C:	200 mPas
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	38.5 %
Solids content:	61.3 %
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:**
Thermal decomposition or burning may release oxides of lead, chromium and antimony, toxic gases/vapours.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
108-65-6 2-methoxy-1-methylethyl acetate		
Oral	LD50	8500 mg/kg (rat)
Dermal	LD50	5000 mg/kg (Rat)
Inhalative	LC50/4 h	35.7 mg/l (rat)
1344-37-2 Lead sulphochromate yellow (PY34)		
Oral	LD50	>10000 mg/kg (rat)
12656-85-8 Lead chromate molybdate sulphate (PR104)		
Oral	LD50	>5000 mg/kg (rat)
123-86-4 Butyl ethanoate		
Oral	LD50	10760 mg/kg (rat)
Dermal	LD50	14112 mg/kg (Rab)
Inhalative	LC50/4 h	23.4 mg/l (Rat)
1330-20-7 Xylene (mix)		
Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rbt)
90989-38-1 Xylene (mixed isomers)		
Oral	LD50	3523 mg/kg (Rat)
Dermal	LD50	12126 mg/kg (Rab)
Inhalative	LC50/4 h	27000 mg/l (Rat)

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 8)

64742-95-6 Solvent naphtha (petroleum), light arom.		
Oral	*LD50*	*3592 mg/kg (rat)*
Dermal	*LD50*	*3160 mg/kg (Rab)*
Inhalative	*LC50/4 h*	*6193 mg/l (rat)*

· ***Primary irritant effect:***
· ***Skin corrosion/irritation***
Causes skin irritation.
· ***Serious eye damage/irritation*** *Based on available data, the classification criteria are not met.*
· ***Respiratory or skin sensitisation***
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
· ***CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)***
· ***Germ cell mutagenicity*** *Based on available data, the classification criteria are not met.*
· ***Carcinogenicity***
The EC classifies C.I. Pigment Yellow 34 and C.I. Pigment Red 104 as carcinogenic category 1B.
May cause cancer.
· ***Reproductive toxicity***
The EC classifies C.I. Pigment Yellow 34 and C.I. Pigment Red 104 as toxic for reproduction category 1A.
May damage the unborn child. Suspected of damaging fertility.
· ***STOT-single exposure*** *Based on available data, the classification criteria are not met.*
· ***STOT-repeated exposure***
May cause damage to organs through prolonged or repeated exposure.
The EC classifies C.I. Pigment Yellow 34 and C.I. Pigment Red 104 as STOT repeated exposure Cat. 2 (route: oral, target organs: liver, kidney, nervous system).
LOAEL (oral, rat, 90 days)
1600 mg/kg bodyweight/day
NOAEL (oral, rat, 90 days)
288 mg/kg bodyweight/day
· ***Aspiration hazard*** *Based on available data, the classification criteria are not met.*

SECTION 12: Ecological information

· ***12.1 Toxicity***
· ***Aquatic toxicity:***
CAS No 1344-37-2 Lead sulphochromate & CAS No 12656-85-8 Lead chromate molybdate sulphate.

LC50 fishes 1 > 10000 mg/l Leuciscus idus 96h (test method comparable to OECD 203)
EC50 Daphnia 1 > 100 mg/l Daphnia magna 48h (test method comparable to OECD 202)
EC50 other aquatic organisms 1 > 100 mg/l Scenedesmus subspicatus 72h (OECD 201)
LC50 fish 2 > 100 mg/kg Oncorhychus mykiss 96h
EC50 other aquatic organisms 2 > 10000 ml/l Pseudomonas putida 30m
NOEC (chronic) 0.7 mg/l Daphia magna 21d
NOEC chronic fish 1 mg/l Pimephales promelas 60d
NOEC (additional information) Ecotoxicity data based on tests on similar product.
Acute Fish toxicity
Solvent naphtha (petroleum), light arom. (content of benzene less than 0,1 %)
LC50 9.22 mg/l
Species: Oncorhynchus mykiss (rainbow trout)
Exposure duration: 96 h

Acute toxicity for daphnia
Solvent naphtha (petroleum), light arom. (content of benzene less than 0,1 %)
EC50 6.14 mg/l
Species: Daphnia magna (Water flea)
Exposure duration: 48 h

Acute toxicity for algae

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 9)

Solvent naphtha (petroleum), light arom. (content of benzene less than 0,1 %)
ErC50 2.9 mg/l
Species: Pseudokirchneriella subcapitata (green algae)
Exposure duration: 72 h

Acute bacterial toxicity
Solvent naphtha (petroleum), light arom. (content of benzene less than 0,1 %)
EC50 1 - 10 mg/l

Ecotoxicology Assessment
Solvent naphtha (petroleum), light arom. (content of benzene less than 0,1 %)
Chronic aquatic toxicity: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Data based on the safety data sheet (SDS) by the supplier.
Acute Fish toxicity
n-Butyl acetate
LC50 18 mg/l
Species: Pimephales promelas (fathead minnow)
Exposure duration: 96 h

Chronic Fish toxicity
n-Butyl acetate
No data available.

Acute toxicity for daphnia
n-Butyl acetate
EC50 44 mg/l
Species: Daphnia (water flea)
Exposure duration: 48 h

Chronic toxicity to daphnia
n-Butyl acetate
NOEC 23 mg/l
Species: Daphnia magna (Water flea)
Exposure duration: 21 d
Method: OECD Test Guideline 211

Acute toxicity for algae
n-Butyl acetate
EC50 675 mg/l
Species: Scenedesmus quadricauda (Green algae)
Exposure duration: 72 h

Acute bacterial toxicity
EC50 356 mg/l
Species: activated sludge
Exposure duration: 40 h

· ***12.2 Persistence and degradability*** *No further relevant information available.*
· ***12.3 Bioaccumulative potential***
CAS No 1344-37-2 Lead sulphochromate & CAS No 12656-85-8 Lead chromate molybdate sulphate.

Bioconcentration factor (BCF REACH) < 2000
Log Pow Not Applicable
Log Kow Not Applicable
Bioaccumulative potential Due to the very low solubility of C. I. Pigment Yellow 34 in water the bioavailability of the substance is expected to be low. Therefore, the bioaccumulation potential of the substance is expected to be low.
· ***12.4 Mobility in soil*** *No further relevant information available.*
· ***Ecotoxical effects:***
· ***Remark:*** *Toxic for fish*

(Contd. on page 11)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 10)

· ***Additional ecological information:***
· ***General notes:***
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
· ***12.5 Results of PBT and vPvB assessment***
· ***PBT:*** *Not applicable.*
· ***vPvB:*** *Not applicable.*
· ***12.6 Other adverse effects*** *No further relevant information available.*

SECTION 13: Disposal considerations

· ***13.1 Waste treatment methods***
· ***Recommendation***
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· ***Uncleaned packaging:***
· ***Recommendation:*** *Disposal must be made according to official regulations.*

SECTION 14: Transport information

· ***14.1 UN-Number***	
· ***ADR, IMDG, IATA***	*UN1263*
· ***14.2 UN proper shipping name***	
· ***ADR***	*1263 PAINT (not viscous), ENVIRONMENTALLY HAZARDOUS*
· ***IMDG***	*PAINT (Lead sulphochromate yellow (PY34), Lead chromate molybdate sulphate (PR104)), MARINE POLLUTANT*
· ***IATA***	*PAINT*
· ***14.3 Transport hazard class(es)***	
· ***ADR, IMDG***	
· ***Class***	*3 Flammable liquids.*
· ***Label***	*3*
· ***IATA***	
· ***Class***	*3 Flammable liquids.*
· ***Label***	*3*
· ***14.4 Packing group***	
· ***ADR, IMDG, IATA***	*III*
· ***14.5 Environmental hazards:***	*Product contains environmentally hazardous substances: Lead sulphochromate yellow (PY34), Lead chromate molybdate sulphate (PR104)*

(Contd. on page 12)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 Revision: 21.11.2016

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 11)

· **Marine pollutant:**	Symbol (fish and tree)
· **Special marking (ADR):**	Symbol (fish and tree)
· **14.6 Special precautions for user**	Warning: Flammable liquids.
· **Danger code (Kemler):**	30
· **EMS Number:**	F-E,S-E
· **Segregation groups**	Heavy metals and their salts (including their organometallic compounds)
· **Stowage Category**	A
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **Transport category**	3
· **Tunnel restriction code**	D/E
· **IMDG**	
· **Limited quantities (LQ)**	5L
· **Excepted quantities (EQ)**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":**	UN 1263 PAINT (NOT VISCOUS), 3, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category**
E2 Hazardous to the Aquatic Environment
P5c FLAMMABLE LIQUIDS
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 20, 28, 29, 30, 47

· **National regulations:**
· **Additional classification according to Decree on Hazardous Materials, Annex II:**
Carcinogenic hazardous material group III (dangerous).

· **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
Exceptions can be made by the authorities in certain cases.

· **Technical instructions (air):**

Class	Share in %
II	9.7
NK	38.5

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

(Contd. on page 13)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 12)

· ***Other regulations, limitations and prohibitive regulations***
· ***Substances of very high concern (SVHC) according to REACH, Article 57***
REACH Candidate List (Substance of Very High Concern): C.I. Pigment Red 104 has been added to the "Candidate List" of Substances of Very High Concern (SVHC).
REACH ANNEX XIV: C.I. Pigment Yellow 34 is listed in Annex XIV of Regulation (EC) 1907/2006.
REACH ANNEX XVII: The use of the pigment is restricted in Annex XVII of REACH, entries 28 and 30.
Directive 2004/37/EC: Protection of workers from the risks related to exposure to carcinogens or mutagens at work
Directive 92/85/EEC: Protection of pregnant workers and workers who have recently given birth or are breastfeeding
Directive 94/33/EC: Minimum requirements for the protection of young people at work
Regional legislation: Labelling in accordance with Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures.

1344-37-2	*Lead sulphochromate yellow (PY34)*
12656-85-8	*Lead chromate molybdate sulphate (PR104)*

· ***15.2 Chemical safety assessment:*** *A Chemical Safety Assessment has not been carried out.*

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Respiratory Sensitisation: Based on the available case reports such as the European Union Risk Assessment Report (RAR), it is concluded that hexavalent chromium compounds can cause occupational asthma and respiratory sensitisation. As Cr (VI) is a transformation product of this pigment, this information can be read across to address the respiratory sensitising potential of C.I. Pigment Yellow 34 and C.I Pigment Red 104. The likelihood of respiratory sensitization of C.I. Pigment Yellow 34 and C.I Pigment Red 104 is however considered very low due to very poor bioavailability. No information is available for C.I. Pigment Yellow 34 and C.I Pigment Red 104.

Skin sensitisation: Available information for hexavalent chromium, Cr (VI), including the European Union Risk Assessment Report (RAR), can be read across to address the skin sensitising potential of C.I. Pigment Yellow 34 and C.I Pigment Red 104. It can be assumed that the skin sensitising properties of this transformation product Cr (VI) can be held responsible for the skin sensitising potential of the pigment. The likelihood of skin sensitization of C.I. Pigment Yellow 34 and C.I Pigment Red 104 is however considered very low due to very poor bioavailability. No information is available for C.I. Pigment Yellow 34 and C.I Pigment Red 104.
Carcinogenicity: As noted in the OSHA Lead Standard, repeated and prolonged exposures may cause delayed effects involving the blood, gastro-intestinal, nervous and reproductive systems. Chronic overexposure may cause effects of chronic lead toxicity. "Chromium and certain chromium compounds" are currently classified by IARC (Group 2B) as possible carcinogens but it is stipulated that 'the compound(s) responsible for the carcinogenic effect in humans cannot be specified'. ACGIH currently lists 'chromates of lead' as 'substances suspect of carcinogenic potential for man' (see appendix A2 of ACGIH TLV booklet). EPA's health assessment document for chromium states that 'animal cancer bioassay studies suggest that hexavalent chromium compounds (particularly soluble and sparingly soluble compounds) are probably the etiological agent in chromium related human cancer. Data supporting this position exists in both rats and humans. Rat bronchial implant studies have shown that only calcium, strontium and zinc chromates produced statistically significant increases in the numbers of bronchial carcinomas while no such increases were seen with seven different samples of lead chromate pigments (Levy et al., 1986). All hexavalent chromium compounds (including lead chromates) are considered to be suspect human carcinogens. However, available epidemiological evidence on C.I. Pigment Yellow 34 and Red 104 does not confirm this position. In every case where excess lung cancer incidences have been reported, exposure was either to zinc chromate alone or involved mixed exposures to various combinations of zinc, lead, strontium and barium chromates. In the studies where exposure was reported to be C.I. Pigment Yellow 34 and Red 104 alone, no increased incidence in lung cancer was observed.

· ***Relevant phrases***
H226 Flammable liquid and vapour.

(Contd. on page 14)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 13.12.2016 *Revision: 21.11.2016*

Trade name: Acrythane SC601 Colours (contains lead)

(Contd. of page 13)

H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H350 May cause cancer.
H360Df May damage the unborn child. Suspected of damaging fertility.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· ***Department issuing SDS:*** *Product safety department: LABORATORY*
· ***Contact:*** *Health & Safety Officer*
· ***Abbreviations and acronyms:***
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 1B: Carcinogenicity – Category 1B
Repr. 1A: Reproductive toxicity – Category 1A
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3