

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

Printing date 13.12.2016

Revision: 23.11.2016

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:** **Monothane 2K Topcoat (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

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 coating, 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.

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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 Sens. 1 H317 May cause an allergic skin reaction.
 STOT SE 3 H336 May cause drowsiness or dizziness.

· **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, GHS07, GHS08, GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**

Lead sulphochromate yellow (PY34)

Butyl ethanoate

Lead chromate molybdate sulphate (PR104)

Amide wax

· **Hazard statements**

Flammable liquid and vapour.

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.

May cause drowsiness or dizziness.

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.

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· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

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

CAS: 123-86-4 EINECS: 204-658-1	Butyl ethanoate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	10-25%
CAS: 7727-43-7 EINECS: 231-784-4	barium sulphate, natural substance with a Community workplace exposure limit	10-25%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226	2.5-10%
CAS: 7779-90-0 EINECS: 231-944-3	trizinc bis(orthophosphate) ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	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%
EINECS: 231-545-4	Silicon dioxide, chemically prepared substance with a Community workplace exposure limit	2.5-10%
CAS: 54839-24-6 EINECS: 259-370-9	2-ethoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	2.5-10%
CAS: 123-54-6 EINECS: 204-634-0	pentane-2,4-dione ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Acute Tox. 4, H302	≤ 2.5%
ELINCS: 434-430-9	Amide wax ⚠ Skin Sens. 1B, H317; Aquatic Chronic 4, H413	≤ 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.

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

Treat symptomatically.

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.

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- **Further information about storage conditions:**
Keep receptacle tightly sealed and in a well-ventilated place.
Keep away from heat.
- **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:**

123-86-4 Butyl ethanoate

WEL	Short-term value: 966 mg/m ³ , 200 ppm Long-term value: 724 mg/m ³ , 150 ppm
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7727-43-7 barium sulphate, natural

WEL	Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable dust
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108-65-6 2-methoxy-1-methylethyl acetate

WEL	Short-term value: 548 mg/m ³ , 100 ppm Long-term value: 274 mg/m ³ , 50 ppm Sk
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Silicon dioxide, chemically prepared

WEL	Long-term value: 2.4 mg/m ³
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· DNELs

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/m ³ (Con)
		300 mg/m ³ (Ind)

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/m ³ (Con)
		275 mg/m ³ (Ind)

7779-90-0 trizinc bis(orthophosphate)

Oral	DNEL	0.83 mg/day (Con)
Dermal	DNEL	83 mg/day (Con)
		83 mg/day (Ind)
Inhalative	DNEL	2.5 mg/m ³ (Con)

12656-85-8 Lead chromate molybdate sulphate (PRI04)

Inhalative	DNEL	0.006 mg/m ³ (Human)
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54839-24-6 2-ethoxy-1-methylethyl acetate

Oral	DNEL	13.1 mg/day (Con)
Dermal	DNEL	62 mg/day (Con)
		103 mg/day (Ind)
Inhalative	DNEL	181 mg/m ³ (Con)
		302 mg/m ³ (Ind)

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90989-38-1 Xylene (mixed isomers)

Oral	DNEL	1.6 mg/day (Con)
Dermal	DNEL	108 mg/day (Con)
Inhalative	DNEL	14.8 mg/m ³ (Con)
		77 mg/m ³ (Ind)

· **PNECs**

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 plant 1000 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

· **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.

· **Respiratory protection:**

When spraying the product, use a respiratory protective device.

If spraying this product, an ABEK respirator to EN141 and EN405 is normally sufficient. If in doubt, consult a respirator manufacturer and show this safety data sheet.

· **Protection of hands:**

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.

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· **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:	100 °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:	1.2 Vol %
· Upper:	7.5 Vol %

· **Vapour pressure at 20 °C:** 11.2 hPa

· Density at 20 °C:	1.318 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

· **Solubility in / Miscibility with water:** NOT MISCIBLE· **Partition coefficient (n-octanol/water):** Not determined.· **Viscosity:**

· Dynamic at 20 °C:	300 mPas
· Kinematic:	Not determined.

· **Solvent content:**· **Organic solvents:** 35.7 %· **Solids content:** 65.4 %· **9.2 Other information** No further relevant information available.

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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:**

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)

7727-43-7 barium sulphate, natural

Oral	LD50	>15000 mg/kg (Rat)
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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)

7779-90-0 trizinc bis(orthophosphate)

Oral	LD50	>5000 mg/kg (rat)
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1344-37-2 Lead sulphochromate yellow (PY34)

Oral	LD50	>10000 mg/kg (rat)
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12656-85-8 Lead chromate molybdate sulphate (PR104)

Oral	LD50	>5000 mg/kg (rat)
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Silicon dioxide, chemically prepared

Oral	LD50	>10000 mg/kg (Rat)
Dermal	LD50	>5000 mg/kg (Rab)
Inhalative	LC50/4 h	0.139 mg/l (Rat)

54839-24-6 2-ethoxy-1-methylethyl acetate

Oral	LD50	5000 mg/kg (Rat)
Inhalative	LC50/4 h	6.99 mg/l (Rat)

123-54-6 pentane-2,4-dione

Oral	LD50	570 mg/kg (Rat)
Dermal	LD50	790 mg/kg (Rab)

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)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

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- **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, 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**
May cause drowsiness or dizziness.
- **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 *Oncorhynchus mykiss* 96h
EC50 other aquatic organisms 2 > 10000 ml/l *Pseudomonas putida* 30m
NOEC (chronic) 0.7 mg/l *Daphnia 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
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

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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.

· **Ecotoxicological effects:**

· **Remark:** Toxic for fish

· **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 (trizinc bis(orthophosphate), Lead sulphochromate yellow (PY34)), MARINE POLLUTANT

· **IATA**

PAINT

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· 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: trizinc bis(orthophosphate), Lead sulphochromate yellow (PY34)

· 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)
· Excepted quantities (EQ)

5L
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)
· Excepted quantities (EQ)

5L
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

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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, 48

· **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	4.4
NK	35.7

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

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

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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.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H317 May cause an allergic skin reaction.
- H331 Toxic if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- 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.
- H413 May cause long lasting harmful effects to aquatic life.

· **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
- Acute Tox. 3: Acute toxicity – Category 3
- Resp. Sens. 1: Respiratory sensitisation – Category 1
- Skin Sens. 1: Skin sensitisation – Category 1

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*Skin Sens. 1B: Skin sensitisation – Category 1B**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**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 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4*

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