

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.11.2017

Revision: 02.08.2017

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

- **1.1 Product identifier** For professional use only
- **Trade name:** QAD Enamel Colours
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** Surface Coating
- **Application of the substance / the mixture** Surface Coating

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
  - Flam. Liq. 3 H226 Flammable liquid and vapour.
  - Skin Irrit. 2 H315 Causes skin irritation.
  - Eye Irrit. 2 H319 Causes serious eye irritation.
  - STOT SE 3 H335 May cause respiratory irritation.
  - STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- **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**



- **Signal word** Warning
- **Hazard-determining components of labelling:**  
Xylene (mix)
- **Hazard statements**
  - H226 Flammable liquid and vapour.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H335 May cause respiratory irritation.
  - H373 May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
  - P210                      Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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- P241 Use explosion-proof electrical/ventilating/lighting equipment.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**

Contains 2-butanone oxime, methyl methacrylate. May produce an allergic reaction.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **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: 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	25-50%
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	10-25%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226	2.5-10%
CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332	2.5-10%
CAS: 100-42-5 EINECS: 202-851-5	styrene monomer Flam. Liq. 3, H226; Repr. 2, H361d; STOT RE 1, H372; Asp. Tox. 1, H304; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 3, H412	≤ 2.5%
CAS: 108-88-3 EINECS: 203-625-9	Toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	≤ 2.5%
CAS: 96-29-7 EINECS: 202-496-6	2-butanone oxime Carc. 2, H351; Eye Dam. 1, H318; Acute Tox. 4, H312; Skin Sens. 1, H317	≤ 2.5%
CAS: 80-62-6 EINECS: 201-297-1	methyl methacrylate Flam. Liq. 2, H225; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	≤ 2.5%

- **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**

- **After inhalation:**

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

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- **After skin contact:**  
*Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing.*
- **After eye contact:**  
*Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*
- **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.*

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
*CO<sub>2</sub>, 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** *No further relevant information available.*
- **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:**  
*Prevent seepage into sewage system, workpits and cellars.  
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.*
- **Information about fire - and explosion protection:**  
*Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.*
- **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.*
- **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.*

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· **8.1 Control parameters**· **Ingredients with limit values that require monitoring at the workplace:****1330-20-7 Xylene (mix)**

WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
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**108-65-6 2-methoxy-1-methylethyl acetate**

WEL	Short-term value: 548 mg/m <sup>3</sup> , 100 ppm Long-term value: 274 mg/m <sup>3</sup> , 50 ppm Sk
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**100-41-4 ethylbenzene**

WEL	Short-term value: 552 mg/m <sup>3</sup> , 125 ppm Long-term value: 441 mg/m <sup>3</sup> , 100 ppm Sk
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· **DNELs****1330-20-7 Xylene (mix)**

Dermal	DNEL	108 mg/day (Con) 180 mg/day (Ind)
Inhalative	DNEL	14.8 mg/m <sup>3</sup> (Con) 77 mg/m <sup>3</sup> (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/m <sup>3</sup> (Con) 77 mg/m <sup>3</sup> (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 <sup>3</sup> (Con) 275 mg/m <sup>3</sup> (Ind)

**100-42-5 styrene monomer**

Oral	DNEL	2.1 mg/day (Con)
Dermal	DNEL	343 mg/day (Con) 406 mg/day (Wor)
Inhalative	DNEL	10.2 mg/m <sup>3</sup> (Con) 85 mg/m <sup>3</sup> (Wor)

**108-88-3 Toluene**

Oral	DNEL	8.13 mg/day (Human)
Dermal	DNEL	226 mg/day (Human)
Inhalative	DNEL	56.5 mg/m <sup>3</sup> (Human)

**96-29-7 2-butanone oxime**

Dermal	DNEL	0.78 mg/day (Con) 1.3 mg/day (Ind)
Inhalative	DNEL	2.7 mg/m <sup>3</sup> (Con) 9 mg/m <sup>3</sup> (Ind)

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**80-62-6 methyl methacrylate**

Dermal	DNEL	8.2 mg/day (Con)
		13.67 mg/day (Ind)
Inhalative	DNEL	74.3 mg/m <sup>3</sup> (Con)
		210 mg/m <sup>3</sup> (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

· **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 eyes and skin.

· **Respiratory protection:** When spraying the product, use a respiratory protective device.· **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.



Protective gloves

· **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

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### 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/freezing point:	Undetermined.
Initial boiling point and boiling range:	136°C

· Flash point: 24°C

· Flammability (solid, gas): Not applicable.

· Ignition temperature: > 432°C

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

##### · Explosion limits:

Lower:	1.0 Vol %
Upper:	7.0 Vol %

· Vapour pressure at 20°C: 6.7 hPa

Density at 20°C:	0.976 g/cm <sup>3</sup>
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:	200 mPas
Kinematic:	Not determined.

##### · Solvent content:

Organic solvents: 37.4 %

Solids content: 45.2 %

· 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.

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- **10.6 Hazardous decomposition products:**  
No dangerous decomposition products when stored and handled correctly

### 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:**

#### 1330-20-7 Xylene (mix)

Oral	LD50	5,000 mg/kg (Rat)
Dermal	LD50	2,000 mg/kg (rbt)
Inhalative	LC50/4 h	4,300 mg/l (Rat)

#### 90989-38-1 Xylene (mixed isomers)

Oral	LD50	3,523 mg/kg (Rat)
Dermal	LD50	12,126 mg/kg (Rab)
Inhalative	LC50/4 h	27,000 mg/l (Rat)

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

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	5,000 mg/kg (Rat)
Inhalative	LC50/4 h	>10.8 mg/l (Rat)

#### 100-41-4 ethylbenzene

Oral	LD50	3,500 mg/kg (rat)
Dermal	LD50	17,800 mg/kg (rbt)

#### 100-42-5 styrene monomer

Oral	LD50	5,000 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rat)
Inhalative	LC50/4 h	11.8 mg/l (Rat)

#### 108-88-3 Toluene

Oral	LD50	636 mg/kg (Rat)
Dermal	LD50	>5,000 mg/kg (Rat)
Inhalative	LC50/4 h	20 mg/l (Rat)

#### 96-29-7 2-butanone oxime

Oral	LD50	2,326 mg/kg (rat)
Dermal	LD50	1,000 mg/kg (Rab) 200-2,000 mg/kg (rat)
Inhalative	LC50/4 h	>4.8 mg/l (rat)

#### 80-62-6 methyl methacrylate

Inhalative	LC50/4 h	29.8 mg/l (Rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**  
May cause respiratory irritation.

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- **STOT-repeated exposure**  
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.


### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.
- **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

- |   |                             |
|---|-----------------------------|
| · <b>14.1 UN-Number</b>   | UN1263                      |
| · <b>ADR, IMDG, IATA</b>  |                             |
| · <b>14.2 UN proper shipping name</b>   | 1263 PAINT                  |
| · <b>ADR</b>  | PAINT                       |
| · <b>IMDG, IATA</b>   |                             |
| · <b>14.3 Transport hazard class(es)</b>  |                             |
| · <b>ADR, IMDG, IATA</b>  |                             |
|  |                             |
| · <b>Class</b>  | 3 Flammable liquids.        |
| · <b>Label</b>  | 3                           |
| · <b>14.4 Packing group</b>   | III                         |
| · <b>ADR, IMDG, IATA</b>  |                             |
| · <b>14.5 Environmental hazards:</b>  |                             |
| · <b>Marine pollutant:</b>  | No                          |
| · <b>14.6 Special precautions for user</b>  | Warning: Flammable liquids. |
| · <b>Danger code (Kemler):</b>  | 30                          |
| · <b>EMS Number:</b>  | F-E, S-E                    |

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· <b>Stowage Category</b>	A
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>Transport category</b>	3
· <b>Tunnel restriction code</b>	D/E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 1263 PAINT, 3, III

### 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 P5c FLAMMABLE LIQUIDS**
  - **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5.000 t
  - **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50.000 t
  - **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 48
  - **National regulations:**
  - **Technical instructions (air):**
- | Class | Share in % |
|-------|------------|
| I     | 0.2        |
| NK    | 37.4       |
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
  - **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.

- **Relevant phrases**
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- 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.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.

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H351 Suspected of causing cancer.  
 H361d Suspected of damaging the unborn child.  
 H372 Causes damage to organs through prolonged or repeated exposure.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 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

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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