

according to Regulation (EC) No 1907/2006

## VA75 Liquid (Green)

Print date: 22.11.2017

Product code: 1221500

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

#### 1.1. Product identifier

VA75 Liquid (Green)

Product group: Liquid component

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

#### Use of the substance/mixture

Embedding material (liquid component) for material testing.

#### 1.3. Details of the supplier of the safety data sheet

Company name:	Spectrographic Itd
Street:	Unit 4, The Sidings
	Station Road
Place:	Guiseley LS20 8BX
Telephone:	+44(0)1943 879001
e-mail:	sales@spectrographic.co.uk
Internet:	www.spectrographic.co.uk
.4. Emergency telephone	+44(0)1943 879001

#### number:

1

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: Xi - Irritant R phrases: Irritating to eyes, respiratory system and skin. May cause sensitisation by skin contact.

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

#### Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2 Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory/skin sensitization: Skin Sens. 1 Specific target organ toxicity - single exposure: STOT SE 3 Hazard Statements: May cause respiratory irritation. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction.



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### 2.2. Label elements

## Hazardous components which must be listed on the label

Tertrahydrofurfuryl methacrylate

methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate

Warning

GHS07

Signal word:

Pictograms:



## Hazard statements

H335	May cause respiratory irritation.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

#### Precautionary statements

P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3. Other hazards

No information available.

## **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

Chemical characterization

Mixture on basis of Tetrahydrofurfuryl methacrylate and accelerator.

#### Hazardous components

EC No CAS No Index No REACH No	Chemical name Classification according to Directive 67/548/EEC Classification according to Regulation (EC) No. 1272/2008 [CLP]	Quantity
219-529-5 2455-24-5	Tertrahydrofurfuryl methacrylate Xi - Irritant R36/37/38 Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335	80 - < 85 %
201-297-1 80-62-6 01-2119452498-28	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate F - Highly flammable, Xi - Irritant R11-37/38-43 Flam. Liq. 1, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H224 H315 H317 H335	10 - < 15 %
218-218-1 2082-81-7	1,4-Butandiol dimethacrylate R43 Skin Sens. 1; H317	10 - < 15 %

Full text of R-, H- and EUH-phrases: see section 16.



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### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

Remove contaminated, saturated clothing immediately. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

#### After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

#### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

#### After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

#### After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water.

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

No 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 media

Co-ordinate fire-fighting measures to the fire surroundings. Foam Extinguishing powder Carbon dioxide (CO2)

#### Unsuitable extinguishing media

Full water jet

#### 5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air.

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions. protective equipment and emergency procedures

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.



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> Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

#### Advice on protection against fire and explosion

In case of fire: Immerse in cold water for a prolonged period.

## Further information on handling

Avoid: UV-radiation/sunlight

Can polymerise exothermically if heated, exposed to air, sunlight or by addition or free radical initiators.

#### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed.

## Advice on storage compatibility

No special measures are necessary.

## 7.3. Specific end use(s)

Embendding material

### **SECTION 8: Exposure controls/personal protection**

### 8.1.Control parameters

#### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³ fibres/ml	Category	Origin
2455-24-5	Tertrahydrofurfuryl methacrylate		50	TWA (8 h)	
				STEL (15 min)	
80-62-6	Methyl methacrylate	50	208	TWA (8 h)	WEL
		100	416	STEL (15 min)	WEL

### **DNEL/DMEL** values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylprope	enoate; methyl metha	crylate	
Worker DNEI	_, long-term	inhalation		208 mg/m <sup>3</sup>
Worker DNEI	_, long-term	dermal		17 mg/kg bw/day



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#### 8.2. Exposure controls

## Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

#### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

#### Eye/face protection

Suitable eye protection: goggles.

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

Wear suitable protective clothing.

## **Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

#### **SECTION 9: Physical and chemical properties**

#### 9.1.Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	characteristic

pH-Value: Changes in the physical state Test method

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Melting point:	-113 °C	OECD 102	
Initial boiling point and boiling range:	222 °C	OECD 103	
Flash point:	99 °C	ASTM D 93	
Flammability			
Solid:	not applicable		
Gas:	not applicable		
Lower explosion limits:	not determined		
Upper explosion limits:	not determined		
Ignition temperature:	235 °C	DIN 51794	
Auto-ignition temperature			
Solid:	not applicable		
Gas:	not applicable		
Decomposition temperature:	not determined		
Oxidizing properties			
Not oxidizing.			
Vapour pressure:	not determined		
Density (at 20 °C):	1,042 g/cm³		
Water solubility: (at 20 °C)	unlöslich	OECD 116	
Solubility in other solvents miscible with most organic solven	ts		
Partition coefficient:	log Pow 1,35		
Viscosity / dynamic: (at 20 °C)	3 mPa⋅s		
Flow time:	Daten nicht verfügbar0		
Vapour density: (at 20 °C)	> 1		
Evaporation rate:	not determined		
<u>9.2. Other information</u>			
Solid content:	not determined		
SECTION 10: Stability and reactivity			

## **SECTION 10: Stability and reactivity**

#### 10.1.Reactivity

No hazardous reaction when handled and stored according to provisions.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

## 10.3. Possibility of hazardous reactions

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

## 10.4. Conditions to avoid

none

### 10.5. Incompatible materials

No information available.

#### 10.6. Hazardous decomposition products

No known hazardous decomposition products.



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## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
80-62-6	methyl 2-methylprop-2-enoate;	methyl 2-m	ethylpropenoate	; methyl methacrylate	
	oral	LD50	>5000 mg/kg	Rat	OECD 401
	dermal	LD50	>5000 mg/kg	Rabbit	
	inhalative vapour	LC50	29,8 mg/l	Rat	
2082-81-7	1,4-Butandiol dimethacrylate				
	oral	LD50	> 10000	Rat	
		mg/kg			
	dermal	LD50	> 3000 mg/kg	Rabbit	

#### Irritation and corrosivity

Causes serious eye irritation.

Causes skin irritation.

### Sensitising effects

May cause an allergic skin reaction. (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate), (1,4-Butandiol dimethacrylate)

#### STOT-single exposure

May cause respiratory irritation. (Tertrahydrofurfuryl methacrylate), (methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate)

## Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.

## Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

### **SECTION 12: Ecological information**

# 12.1.Toxicity

	The product is not: Ecotox	kic.				
CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d] Species	Source	
80-62-6	methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate; methyl methacrylate					
	Acute fish toxicity	LC50	> 79 mg/l	96 h Oncorhynchus mykiss (Rainbow trout)	OECD 203	
	Acute algae toxicity	ErC50	> 110 mg/l	72 h Selenastrum capricornutum	OECD 201	
	Acute crustacea toxicity	EC50	69 mg/l	48 h Daphnia magna (Big water	OECD 202	
				flea)		
Revision No: 1,00			GB - EN	F	Revision date: 22.	



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	Crustacea toxicity	NOEC	37 mg/l	21 d Daphnia magna (Big water flea)	OECD 202
2082-81-7	1,4-Butandiol dimethacrylat	e			
	Acute fish toxicity	LC50	32,5 mg/l	96 h Oncorhynchus mykiss (Rainbow trout)	
	Acute crustacea toxicity	EC50	7,51 mg/l	48 h Daphnia magna (Big water flea)	OECD 211
	Crustacea toxicity	NOEC	7,51 mg/l	Selenastrum capricornutun	n
<u>12.2.Persister</u>	nce and degradability				
	The product has not been	tested.			
12.3.Bioaccur	nulative potential				
	The product has not been				
Partition co	pefficient n-octanol/water				
CAS No	Chemical name				Log Pow
80-62-6 2082-81-7	methyl 2-methylprop-2-ei 1,4-Butandiol dimethacry	•	yl 2-methylprope	noate; methyl methacrylate	1,38 3,1
<u>12.4.Mobility in soil</u>					
The product has not been tested.					
12.5.Results of PBT and vPvB assessment					
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.					
12.6 Other adv	verse effects				

#### 12.6. Other adverse effects

No information available.

## **Further information**

Avoid release to the environment.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

#### Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

#### **Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

### **SECTION 14: Transport information**

#### Land transport (ADR/RID)

<u>14.1.<b>UN number:</b></u>	UN 1247
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED
14.3.Transport hazard class(es):	3
14.4.Packing group:	ll
Hazard label:	3
Classification code:	F1
Limited quantity:	1 L
Transport category:	2
Hazard No:	339
Tunnel restriction code:	D/E
Other applicable information (land	transport)



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Inland waterways transport (ADN)		
<u>14.1.<b>UN number:</b></u>	UN 1247	
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED	
<u>14.3. Transport hazard class(es):</u>	3	
14.4.Packing group:	II	
Hazard label:	3	
Classification code:	F1 1 L	
Limited quantity: Other applicable information (inland		
E2		
Marine transport (IMDG)		
<u>14.1.<b>UN number:</b></u>	UN 1247	
14.2.UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED	
14.3.Transport hazard class(es):	3	
14.4.Packing group:	II	
Hazard label:	3	
Special Provisions:		
Limited quantity:		
EmS: Other applicable information (marin	F-E, S-D	
E2		
Air transport (ICAO)		
<u>14.1.<b>UN number:</b></u>	UN 1247	
14.2. UN proper shipping name:	METHYL METHACRYLATE MONOMER, STABILIZED	
14.3.Transport hazard class(es):	3	
14.4.Packing group:	II	
Hazard label:	3	
Limited quantity Passenger:	1 L	
IATA-packing instructions - Passenger	: 353	
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo:	364	
IATA-max. quantity - Cargo:	60 L	
Other applicable information (air tra	insport)	
E2		
Passenger-LQ: Y341 14.6. <b>Special precautions for user</b>		
No information available.		
	nex II of MARPOL73/78 and the IBC Code	
not applicable		

not applicable



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## **SECTION 15: Regulatory information**

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

### EU regulatory information

#### Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

#### National regulatory information

Employment restrictions:

Water contaminating class (D): Skin resorption/Sensitization:

Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing. 1 - slightly water contaminating Causes allergic hypersensitivity reactions.

## 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**

#### Abbreviations and acronyms

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 Harmonized 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 LC50: Lethal concentration, 50% LD50: Lethal dose, 50% Relevant R-phrases (Number and full text) Highly flammable.

- 36/37/38 Irritating to eyes, respiratory system and skin.
- 37/38 Irritating to respiratory system and skin.
- May cause sensitisation by skin contact. 43

#### Relevant H- and EUH-phrases (Number and full text)

- H224 Extremely flammable liquid and vapour.
- H315 Causes skin irritation.
- May cause an allergic skin reaction. H317
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

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#### **Further Information**

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The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

he data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)