according to 1907/2006/EC, Article 31

Printing date 11.05.2015 Version number 1 Revision: 11.05.2015

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

1.1 Product identifier

Trade name: Ironlak Permanent Marker & Ironlak Strikers Tri-Grip Twin Markers.

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

Application of the substance / the preparation: lnk.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

AVT Paints.

P.O Box 977, Spring Hill QLD 4004, AUSTRALIA

Tel: 1300 789 876 (+617 3823 5449) Email: ironlak@avtpaints.com Web: www.ironlak.com

Further information obtainable from:

REACH Only Representative

B-Lands Consulting

WTC, 5 Place Robert Schuman, BP 1516

38025 Grenoble, FRANCE Tel: +33 476 295 869 Fax: +33 476 295 870

Email: europa@reach-compliance.eu

Web: www.reachteam.eu

1.4 Emergency telephone number:

UK - National Poisons Emergency: +44 870 600 6266 (24h - health professionals only).

Ireland - National Poisons Information Centre: +353 1 8379964.

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. H300 Fatal if swallowed. Acute Tox. 2 STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure. Eye Irrit. 2 H319 Causes serious eye irritation. Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Aguatic Chronic 3 H412 Harmful to aguatic life with long lasting effects.

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 GHS06 GHS08

Signal word: Danger

Hazard-determining components of labelling:

2-[3-(1,3-dihydro-1,3, 3-trimethyl-2Hindol-2-ylidene) prop-1-enyl]-1,3, 3-trimethyl-3Hindolium chloride

Rosin ethanol

1-methoxy-2-propanol

10 - <15%

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Hazard statements:

H226 Flammable liquid and vapour.

H300 Fatal if swallowed.

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

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture consisting of the following components.

Hazardous components:		
CAS: 64-17-5	ethanol	50 - <75%
EINECS: 200-578-6 Index number: 603-002-00-5	Flam. Liq. 2, H225; STOT RE 2, H373; Eye Irrit. 2, H319; STOT SE 3, H335-H336	
CAS: 107-98-2	1-methoxy-2-propanol	25 - <35%
EINECS: 203-539-1	Flam. Liq. 3, H226; Eye Irrit. 2, H319; STOT SE 3, H336]
Index number: 603-064-00-3		
CAS: 8050-09-7	Rosin	20 - <25%
EINECS: 232-475-7	Aquatic Chronic 2, H411; Skin Sens. 1, H317	
Index number: 650-015-00-7		
CAS: 6320-14-5	2-[3-(1,3-dihydro-1,3, 3-trimethyl-2Hindol-2-ylidene) prop-1-	7 - <25%
EINECS: 228-668-0	enyl]-1,3, 3-trimethyl-3Hindolium chloride	
	Acute Tox. 2, H300	
Non-hazardous components:		

hydrogen bis[2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-

EINECS: 257-789-1 phenyl-3H-pyrazol-3-onato(2-)]chromate(1-) Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

CAS: 52256-37-8

Immediately remove any clothing soiled by the product.

according to 1907/2006/EC, Article 31

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In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in the recovery position.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.

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:

Wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2 Environmental precautions Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Dispose contaminated material as waste according to item 13.

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 Ensure good ventilation/exhaustion at the workplace.

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

Requirements to be met by storerooms and receptacles: Store in a cool and dry place.

Information about storage in one common storage facility: Store away from oxidising agents.

Further information about storage conditions: Keep container tightly sealed.

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

according to 1907/2006/EC, Article 31

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:				
64-17-5 ethanol				
WEL (Great Britain) Long-term value: 1920 mg/m³, 1000 ppm				
107-98-2 1-methoxy-2-propanol				
WEL (Great Britain)	Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm Sk			
IOELV (EU)	Short-term value: 568 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm Skin			
8050-09-7 Rosin				
WEL (Great Britain)	Short-term value: 0.15 mg/m³ Long-term value: 0.05 mg/m³ Sen			

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.

Respiratory protection:

In case of brief exposure use respiratory filter device. In case of intensive or longer exposure use selfcontained respiratory protective device.

Protection of hands:



Protective gloves.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye protection:



Safety glasses with side-shields (EN 166).

Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Liquid.

Colour: Various colours.

Odour: Alcohol-like.
Odour threshold: Not determined.

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pH-value: 3-9

Melting point/Melting range: Not determined.

Boiling point/Boiling range: 96 $^{\circ}$ C Flash point: 23 $^{\circ}$ C

Flammability (solid, gaseous): Not determined.

Ignition temperature: Not determined.

Decomposition temperature: Not determined.

Danger of explosion: Product is not explosive. However, formation of explosive air/

vapour mixtures are possible.

Explosion limits:

Lower: 1.7 Vol % **Upper:** 13.5 Vol %

Oxidising properties Not determined.

Vapour pressure:1.9 kPaDensity at 20 ℃:0.85 g/cm³

Relative density

Vapour density

Not determined.

Evaporation rate

Not determined.

Solubility in / Miscibility with

Water: Not determined.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic: 2-5 mPas **Kinematic:** Not determined.

9.2 Other informationNo further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No data available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid

Avoid contact with: Ignition sources such as open flames, sparks, static discharges or glowing metal surfaces.

10.5 Incompatible materials Oxidizing agents.

10.6 Hazardous decomposition products

Formation of toxic gases is possible during heating or in case of fire.

according to 1907/2006/EC, Article 31

Printing date 11.05.2015 Version number 1 Revision: 11.05.2015

Trade name: Permanent Marker Ink

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values:			
64-17-5 ethanol			
Oral	LD50	7060 mg/kg (rat)	
Inhalative	LC50/4h	20000 mg/L (rat)	
107-98-2 1-methoxy-2-propanol			
Oral	LD50	5660 mg/kg (rat)	
Dermal	LD50	13000 mg/kg (Rabbit)	
Inhalative	LC50/4h	6 mg/L (rat)	

Primary irritant effect:

on the skin: No irritant effect known. on the eye: No irritating effect known.

Sensitisation: Sensitisation possible through skin contact.

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.

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: Do not allow product to reach sewage system.

Uncleaned packaging Recommendation:

Disposal must be made according to official regulations.

Packaging that may not be cleansed must be disposed of in the same manner as the product.

SECTION 14: Transport information

14.1 UN Number

ADR, IMDG, IATA UN2929

14.2 UN proper shipping name

ADR 2929 TOXIC LIQUID, FLAMMABLE, ORGANIC,

N.O.S. (ETHANOL (ETHYL ALCOHOL), 2-[3-(1,3-dihydro-1,3, 3-trimethyl-2Hindol-2-ylidene) prop-1-

enyl]-1,3, 3-trimethyl-3Hindolium chloride)

IMDG

TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S.

(ETHANOL (ETHYL ALCOHOL), 2-[3-(1,3-dihydro-

according to 1907/2006/EC, Article 31

Printing date 11.05.2015 Version number 1 Revision: 11.05.2015

Trade name: Permanent Marker Ink

1,3, 3-trimethyl-2Hindol-2-ylidene) prop-1-enyl]-1,3, 3-

trimethyl-3Hindolium chloride)

IATA TOXIC LIQUID, FLAMMABLÉ, ORGANIC, N.O.S.

(ETHANOL, 2-[3-(1,3-dihydro-1,3, 3-trimethyl-2Hindol-2-ylidene) prop-1-enyl]-1,3, 3-trimethyl-3Hindolium

chloride)

14.3 Transport hazard class(es)

ADR



Class 3 Flammable liquids.

Label 3+6.1

IMDG



Class 3 Flammable liquids.

Label 3/6.1

IATA



Class 3 Flammable liquids.

Label 3 (6.1)

14.4 Packing group

ADR, IMDG, IATA

14.5 Environmental hazards

Marine pollutant: No

14.6 Special precautions for userWarning: Flammable liquids.

Danger code (Kemler): 336
EMS Number: F-E,S-D

14.7 Transport in bulk according to Annex II

of MARPOL 73/78 and the IBC Code Not applicable.

Transport/Additional information:

ADR

Excepted quantities (EQ) Code: E4

Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 500 ml

Tunnel restriction code: D/E

IMDG

Limited quantities (LQ)

Excepted quantities (EQ) Code: E5

Maximum net quantity per inner packaging: 1 ml Maximum net quantity per outer packaging: 300 ml

according to 1907/2006/EC, Article 31

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SECTION 15: Regulatory information

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

No further relevant information available.

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.

H300 Fatal if swallowed.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

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

H411 Toxic to aquatic life with long lasting effects.

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 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 2: Acute toxicity, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

 $\label{eq:Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category \, 3$