MATERIAL SAFETY DATA SHEET

This Safety Data Sheet is prepared in accordance with formatting described in the REACH Regulation (EC) No 1907/2006 and (EU) No 453/2010

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

1.1 Product identifiers

Product Name: Orcein Solution (Shikata)
Product Code: HST210
Brand: Solmedia Ltd

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

Identified uses: For professional use only.

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Ltd.
- Address of Supplier: Unit 2, Vernon Drive
  Battlefield Enterprise Park
  Shrewsbury
  SY1 3TF
  UK
- Telephone: 0844 80 80 900
- Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008:

Flammable liquid, (Category 2)

Specific target organ toxicity — single exposure- Category 2

2.2 Label elements

Labelling in accordance with Classification Labelling and Packaging Regulation (EC) No 1272/2008

DANGER

Hazard Statements

H225 Highly flammable liquid and vapour.

H371 May cause damage to the optic nerve & central nervous system by the oral route

Precautionary Statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

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

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

P309+P311 IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician

P403+P233 Store in a well-ventilated place. Keep container tightly closed

2.3 Other hazards

Dyes and Stains by their physical nature may result in permanent staining if in contact with skin and clothes.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Mixtures
Synonyms: None
Orcein Solution (Shitaka) contains

Name	EC No	CAS-No	Content	Classification in accordance with Regulation (EC) No 1272/2008
Ethanol	200-578-6	64-17-5	<70 %	Flam.Liq 2; H225
Methanol	200-659-6	67-56-1	<5%	Flam.Liq 2; H225; Acute Tox 3; H301, H311, H331; STOT SE; H370
Orcein Synthetic	215-750-6	1400-62-0	1%	Acute Tox.3;H302
Hydrochloric Acid	231-595-7	7647-01-0	1%	Skin Corr1B; H314 STOT SE3; H335

Refer to section 16 for additional classification information

SECTION 4: First aid measures

4.1 Description of first aid measures

If exposed keep patient calm and seek immediate medical attention. Show this safety data sheet to doctor/physician in attendance.

If Inhaled Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Get medical advice/attention.

In case of skin contact

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical advice/attention.

If swallowed

Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Rinse out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Use alcohol-resistant foam or fine water spray, dry chemical powder or carbon dioxide

For large fires immediately alert fire emergency services. Evacuate personnel to safe area.

5.2 Special hazards arising from the substance or mixture

May emit toxic fumes under fire: Carbon oxides, Nitrogen oxide.

5.3 Advice for firefighters

Avoid contact with skin and eyes. Wear self-contained breathing apparatus /protective clothing. Cool surrounding with water spray. Heating causes a rise in pressure, risk of bursting /explosion. Vapour is slightly heavier than air. Beware of backfire. Stay on upwind side. Use only explosion proved equipment. In case of violent hazardous effect: Wear appropriate tightly sealed suit.

5.4 Further information

Class of fire: B Liquid or melting substances

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Observe all warning labels on container. Ensure adequate ventilation. Avoid breathing vapours, mist or gas. Avoid contact with skin and eyes.

Do not eat, drink, smoke when handling this product. Wash hands thoroughly after handling.

Evacuate personnel to safe area.

6.2 Environmental precautions

Avoid discharge to the environment. Prevent further leakage or spillage where safe to do so. Do not let undiluted product or large quantities enter drains or water course. Inform responsible authorities as appropriate.

6.3 Methods and materials for containment and cleaning up

Absorb spillage with appropriate absorbent material e.g. vermiculite or sand; and dispose into suitably labelled closed containers for disposal according to local regulations. Wash spillage site with water and appropriate detergent. Use non-sparking tools. If using a vacuum cleaner ensure unit is spark-proof /electrically protected. Avoid ignition of vapour

6.4 Reference to other sections

For disposal refer to section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Take precaution to avoid exposure. Observe all warning labels on container. Ensure adequate ventilation. Avoid breathing vapours, mist or gas.

Wash hands thoroughly after handling. Do not eat or drink when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Replace container lid after use and keep container tightly closed to prevent leakage.

7.3 Specific end use(s)

Recommend restriction to professional users only.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

TWA Time Weighted Average Concentration (Long Term Exposure Limit)

STEL Short Term Exposure Limit

LTEL Long Term Exposure Limit

Methanol can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

Workplace Exposure Levels	WEL EH40/2005	Methanol	CAS No. 67-56-1
TWA STEL UK 15 min	250ppm	333 mg/m3	
TWA LTEL UK 8-hour	200ppm	266 mg/m3	
TWA LTEL Europe 8-h	200ppm	266 mg/m3	

Workplace Exposure Levels	WEL EH40/2005	Ethanol	CAS No. 64-17-5
TWA LTEL UK 8-hour	1000ppm	1920 mg/m3	

Workplace Exposure Levels	WEL EH40/2005	Hydrochloric Acid	CAS No.7647-01-0
TWA STEL UK 15 min	5ppm	8 mg/m3	

8.2 Exposure controls

Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Personal protective equipment

Eye/face protection

Avoid exposure to sprays/mist/aerosols. Use face shield and/or safety goggles for eye protection complying with appropriate government standards such as EN166 (EU).

Skin Protection

Handle with chemical-resistant, impervious gloves or gauntlets complying with appropriate government standards: EU Directive 89/686/EEC; standard EN 374. Inspect gloves prior to use to ensure adequate protection. Use proper glove removal technique to avoid skin contact with substance / mixture. Dispose of contaminated gloves after use in accordance with local and national applicable laws and good laboratory practises. Wash and dry hands thoroughly after handling. Promptly remove any contaminated clothing and clean appropriately before reuse.

Body Protection

Use chemically resistant protective clothing with closed cuffs and closed neck, appropriate to the concentration /amount of the substance at the specific workplace.

Respiratory protection

It is recommended that full-face respirator or air hood be used where local exhaust ventilation is inadequate to reduce the atmospheric level to below the national exposure limits for the component substances. Use respirator and components tested and approved to appropriate government standards such as NIOSH (US) or EN 143 / EN 14387 (EU).

8.2.3 Environmental Exposure Controls

None

SECTION 9: Physical and chemical properties

The physical/chemical properties of this product have not been fully investigated. Judgements have been made based upon consideration of its major component(s).

9.1 Information on basic physical and chemical properties

a) Appearance Form:

Red liquid

b) Odour:

Alcoholic odour

d) pH

No data available

e) Melting point:

No data available

f) Boiling point:

No data available

g) Flashpoint:

No data available

h) Evaporation rate:

No data available

i)Flammability (solid, gas):

No data available

j) Upper/lower flammability limits:

No data available

k) Vapour pressure:

No data available

l) Vapour density:

No data available

m) Relative density:

No data available

n) Water solubility:

Soluble

o) Partition coefficient (log Kow):

No data available

p) Autoignition temperature:

No data available

q) Decomposition temperature:

No data available

r) Viscosity:

No data available

s) Explosive properties:

No data available

t) Oxidizing properties:

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under specified conditions of use and storage

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, naked flames, other sources of ignition.

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong Oxidising agents.

10.6 Hazardous decomposition products

Products of Carbon Oxides and Nitrogen Oxides may be produced on burning or heating. The nature of released decomposition products has not been determined.

Other information Particle Size

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

The toxicological properties of this product have not been fully investigated. Judgements have been made based upon consideration of its major component(s).

Toxicokinetic

(a) Acute toxicity	**Methanol**	Oral, human: LDLo=300mg/kg (CAS No 67-56-1) Inh, monkey: LCLo=1000ppm (CAS No 67-56-1) Derm, monkey: LDLo= 393mg/kg (CAS No 67-56-1)
(b) Skin corrosion/irritation		Skin - rabbit – Irritating to skin – 24h
(c) Serious eye damage/ eye irritation		Eyes - rabbit – Eye Irritation – 24h
(d) Respiratory or skin sensitization		No data available
(e) Germ cell mutagenicity		No data available
(f) Carcinogenicity		
Tumorigenic	**IARC:**	No component of this product present at greater Than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC or EC levels

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(g) Reproductive toxicity	No data available
(h) STOT Specific target organ toxicity - single exposure	May cause damage to organs.
(i) STOT Specific target organ toxicity - repeated exposure	No data available
(j) Aspiration hazard	No data available
Potential health effects	
Inhalation	Maybe harmful if inhaled. Contains components which may cause irritation to mucous membranes and upper respiratory tract.
Ingestion	Maybe harmful if ingested. Contains components which may cause vomiting or other adverse effect such as diarrhoea.
Skin	May cause irritation on contact with skin.
Eyes	May cause irritation.
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available.

Do not let undiluted product or large quantities enter drains or water course. Inform responsible authorities as appropriate.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Dispose of as flammable hazardous waste and offer non –recyclable solutions to a licensed waste material processor. Comply with local regulations.

Contaminated Packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID	1170
IMDG	1170
IATA	1170

14.2 UN proper shipping name

ADR/RID	ETHANOL SOLUTION
IMDG	ETHANOL SOLUTION
IATA	ETHANOL SOLUTION

14.3 Transport hazard class(es)

ADR/RID	3
IMDG	3
IATA	3

14.4 Packaging group

ADR/RID	II
IMDG	II
IATA	II

14.5 Environmental hazards

No

Marine Pollutant

No

14.6 Special precautions for user

No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

All components are listed as existing substances in Europe

15.2 Chemical safety assessment

A chemical safety assessment has not carried out for this product

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SECTION 16: Other information

Additional information from Section 3

Hazard Statements

H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H370 Causes damage to organs

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.