### 1 Identification of the preparation and of the company

1.1 Product Name: Intaglio MANGANESE DRIERS 6%

1.2 Application: Printing Ink Drier

1.3 Supplier:

Intaglio Printmakers 9 Playhouse Court, 62 Southwark Bridge Road, London, SE1 0AT

Email: info@intaglioprintmaker.com

Tel: 020 7928 2633 Fax: 020 7928 2711

### 2 Composition/information on ingredients

Chemical characterisation

2.1 Description : Manganese salt of saturated branched C8 acids in Mineral Spirits ; Mn-content approx. 6%

### 2.2 Ingredients presenting health hazard

CAS No.	EC No.	Description	%	Symbol	R-Sentence
6535-19-9	229-437-7	Manganese salt	45	Xn	R20/21/22-36/37/38
64742-82-1	265-185-4	Mineral Spirits	55	Xn	R65-66

### 3 Hazards Indentification

3.1 Hazard symbol : Xn, harmful

3.2 Critical hazards to man and the environment :

Metal compounds are known to persist in the environment and have deleterious Effects on aquatic organisms.

Manganese metal has been identified as potential neurotoxin.

Can cause allergic contact dermatitis after repeated exposure to the skin.

## 4 First aid and emergency procedures

4.1 Effects and symptoms:

Skin: May cause moderate irritation or dermatitis.

Eyes: May cause severe irritation, redness, tearing, blurred vision.

Ingestion: can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

Inhalation: (excessive) can cause nasal and respiratory irritation, CNS effects, incl. dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

Pre-existing eye, skin and respiratory disorders may be aggravated by overexposure.

# **MSDS Intaglio Manganese Driers March 2011**

Product Name: Intaglio MANGANESE DRIERS 6%

4.2 First aid and emergency procedures:

Inhalation

Move to fresh air. Administer oxygen if breathing is difficult. If breathing has stopped, perform artificial respiration.

Get medical attention.

Skin:

Remove contaminated clothing. Wash with soap and water. If irritation or redness persists, get medical attention.

Eyes:

Wash with water for at least 15 minutes. Get medical attention.

Ingestion:

Do not induce vomiting. Aspiration of material into the lungs due to vomiting can cause pneumonitis which can be fatal. Get medical attention immediately.

#### 5 Fire-fighting measures

5.1 Suitable extinguishing media:

Foam, Carbon dioxide, dry chemical, water spray

- 5.2 Extinguishers not to be used for safety reasons: none
- 5.3 Hazardous combustion or decomposition products : carbon monoxide, carbon dioxide and Mn-oxide fumes.
- 5.4 Special protective equipment for firefighters:

Firefighters should use self-contained breathing apparatus

5.5 Unusual fire and explosion hazards: Solvent vapours are heavier than air and may travel along the ground or be moved by ventilation and ignited by flames and sources of ignition.

#### 6 Accidental release measures

6.1 Personal precautions:

Remove persons not wearing protective clothing from spill area.

6.2 Environmental precautions:

Contain and ventilate spill area. Extinguish all sources of ignition. Avoid contamination of streams and sewers.

6.3 Cleaning methods/disposal:

Absorb onto clay, absorbent material. Dispose of in accordance with local standards.

## 7 Handling and storage

Handling

7.1 Precaution for safe handling:

Avoid breathing vapour or mist. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling.

7.2 Protection against fire and explosion:

Never use welding or cutting torch on or near drum (even empty) because product (even residue) can ignite explosively. Solvent may attack some forms of plastic, rubber and coatings. Keep away from heat.

Storage

7.3 Requirements for storage rooms or vessels:

See to proper mechanical ventilation.

Keep containers closed.

7.4 Suitable packaging materials:

Suitable UN packaging

7.5 Conditions of storage:

See par. 7.2 and 7.3.

7.6 Other information:

Product Name: Intaglio MANGANESE DRIERS 6%

## 8 Exposure controls/personal protection

## 8.1 Engineering measurements:

No specific recommendations. See also par. 7.

## 8.2 Control parameters regarding working environment :

CAS No.	Material description	Country	Threshold Limit Value (8 hours)
7439-96-5	Manganese (as metal)	USA/UK/CH/A	5 mg/m3
same		DK 2.5 mg/m3	
		NL/F 1 mg/m3	
64742-82-1	Mineral Spirits	USA/NL/UK 100 p	opm
same		S 50 ppm	
same		DK 25 ppm	

### 8.3 Additional information:

## Personal protection measures

## 8.4 General protection/industrial hygiene measures :

The usual protective measures when dealing with chemicals are to be maintained.

Eye wash should be available for emergency use.

### 8.5 Respiratory:

If high vapour concentrations occur, use approved respirator with organic vapour cartridge

8.6 Hand:

Impervious gloves

8.7 Eye:

Chemical splash goggles or face shield

8.8 Skin:

Impervious clothing, avoid skin contact

## 9 Physical and chemical properties

9.1 Physical state: liquid9.2 Colour: dark brown9.3 Odour: solvent odour

J.Z Colodi. ddik brown				
9.3 Odour: solvent odour				
	Value/range	Unit	Test method	
9.4 Change in physical state :				
9.5 Melting point/range, °C:	N/A			
9.6 Boiling point/range, °C:	190-220			
9.7 Flash point. °C:	> 61		ASTM D3278-89	
9.8 Ignition temperature, °C:	N/A			
9.9 Auto ignition, °C:	275			
9.10 Explosive properties :	N/A			
9.11 Explosion limits, %: (of mineral spirits)				
Lower:	0.6			
Upper:	7.0			
9.12 Vapour pressure, 20°C:	3.0 mmHg			
9.13 Density, 25°C:		g/cm3		
	880-960 kg/m3		ASTM D2935-91	
9.14 Solubility in water/miscibility, °C:	negligible			
9.15 Viscosity, 25 °C:	C max.	Gardner	ASTM D1545-89	
9.16 pH value (at g/l H20) °C:	N/A			
9.17 Solids content range, %:	45		ASTM D1644-88A	
9.18 Partition coefficient: n-octanol/water: log Pow= 4.6 (solvent)				
9.19 Other data:				
9.16 pH value (at g/I H20) °C: 9.17 Solids content range, %: 9.18 Partition coefficient: n-octanol/water: log Pow	N/A 45	Gardner		

# MSDS Intaglio Manganese Driers March 2011

Product Name: Intaglio MANGANESE DRIERS 6%

## 10 Stability and reactivity

10.1 Conditions to avoid / thermal decomposition: Stable under normal temperatures and pressure.

Hazardous

polymerisation has not been reported to occur under normal temperatures and pressure. Avoid heat or sources

of ignition.

10.2 Materials to avoid / hazardous reactions :

Avoid strong acids and oxidisers.

10.3 Hazardous decomposition products:

Carbon dioxide, carbon monoxide and Mn-oxide fumes

### 11 Toxicological information

11.1 Acute toxicity:

11.2 LD/LC50 values relevant for classification:

Components Type Value Species

Drier containing 6% Mn oral >2000 mg/Kg rat

Primary irritation effect: see also par. 3.2.

12 Ecological information

12.1 Persistence/degradability: N/A

12.2 Bioacummulation: N/A

12.3 Aquatic toxicity:

Metal compounds are known to persist in the environment and have deleterious effects on aquatic organisms.

12.4 Water pollution class (=WGK) acc. German regulation: Class 2

#### 13 Disposal considerations

13.1 Hazardous residues:

13.2 Recommendation about disposal:

Dispose of in accordance with local standards.

13.3 Disposal key: 54104 (Germany)

13.4 Contaminated packaging: see par. 13.2.

13.5 Recommendation: see par. 13.2.

## **14 Transport Regulations**

No special transport requirements Follow all local regulations Avoid spillage

# **MSDS Intaglio Manganese Driers March 2011**

## 15 Regulatory information

15.1 Labelling according EC-directives:

15.2 Symbol and hazard description: Xn, harmful

15.3 Hazardous components to be mentioned on the label:

Contains: Manganese salt Mineral Spirits

15.4 R-phrases:

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed

R36/37/38: Irritating to eyes, respiratory system and skin R65: Harmful, may cause lung damage if swallowed

R66: Repeated exposure may cause skin dryness or cracking

15.5 S-phrases:

S23: Do not breathe vapours

S28: after contact with skin, wash immediately with plenty of water

S36/37/39: wear suitable protective clothing, gloves and eye/face protection

S24: Avoid contact with the skin

S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

15.6 National labelling requirements:

15.7 National regulations:

15.7.1 Germany:

Classification acc. VbF: All

TA-air:

Class Content in %

II 5:

Water pollution class (WGK): Class 2

15.8 Data according to directive 1999/13/EC concerning the limitation of emissions of volatile organic compounds (VOC

Directive):55% (maximum)

16 Other information:

Abbreviations:

N/A = not available

CNS = central Nervous System

PSN = Proper shipping name

The before mentioned data meet the present state of our knowledge and experience.

They describe our product with regard to quality and application, do not contain, however, any guarantee for properties, whatsoever. For warranty and responsibility our General Terms and Conditions of Sales are valid.