

Version 17.1 replaces Version 16.1 Revision date: 01/01/2017 According to (EU) No. 2015/830

SECTION	1 IDENTIFICATION OF THE COMPANY / UNDERTAKIN		MIXTURE AND OF THE
1.1	Product identifier:	SPOTCHECK	® SKL-WP2
1.2	Relevant identified uses of the mixture and Relevant identified uses:	Red penetrant Testing (NDT)	used in Non Destructive inspection.
	Uses advised against:		not recommended for any the identified uses above.
1.3	Details of the supplier of the safety data sh Manufacturer: Address: Postcode: Telephone/fax number: Email address of competent person responsible for SDS: National contact:	Magnaflux® (A Faraday Road, Estate, Swindo SN3 5HE Telephone: Fax: Web:	+44 (0)1793 524566 +44 (0)1793 490459 <u>www.eu.magnaflux.com</u> nagnaflux.co.uk
1.4	Emergency telephone number: Opening hours:	T: +44 (0)1793 Office hours (0 - 5pm, Friday 8	CE HOURS, CALL

### **SECTION 2**

### HAZARDS IDENTIFICATION

2.1	Classification of the substance or mixture:				
	Classification according to Regulation	Physical and Chemical Hazard:			
	(EC) No 1272/2008 (CLP):	None			
		Health Hazard:			
		Asp. Tox. 1 H304			
		Eye Dam. 1 H318			

### Additional information

For full text of hazard statements and EU hazard statements see SECTION 16.

Skin Irrit. 2 H315

EÚH066

**Environmental Hazard:** Aquatic Chronic 3 H412

2.2

Label Elements: Labelling according to regulation (EC) No 1272/2008 [CLP]

Labelling according to regulation (EC) No 12	(2/2008 [CLP]
Hazard Pictograms:	
Signal Word:	Danger
Hazard Statement(s):	H304: May be fatal if swallowed and enters
	airways.
	H315: Causes skin irritation.
	H318: Causes serious eye damage.
	H412: Harmful to aquatic life with long
Bracoutionary Statement(a)	lasting effects
Precautionary Statement(s):	P280: Wear protective gloves/protective clothing/eye protection/face protection
	P305+351+338: IF IN EYES: Rinse
	cautiously with water for several minutes.
	Remove contact lenses if present and easy
	to do – continue rinsing.
	P310: Immediately call a POISON CENTER
	or doctor/physician.
	P301+310: IF SWALLOWED: Immediately
	call a POISON CENTER or
	doctor/physician.
	P331: Do NOT induce vomiting.
Supplementary Processionary	P273: Avoid release to the environment.
Supplementary Precautionary Statement(s):	P302+352: IF ON SKIN: Wash with soap and water.
Statement(S).	P332+313: If skin irritation occurs: Get
	medical advice/attention.
	P362+P364: Take off contaminated clothing
	and wash it before reuse.
	P405: Store locked up.
Supplementary Hazard Information	EUH066: Repeated exposure may cause
(EU)	skin dryness or cracking.
Hazard Determining Component(s)	Hydrocarbons C12-C15 n-ALKANES,
	ISOALKANES, CYCLICS, <2% AROMATICS
	Alcohols, C12-C15, branched and linear,
	ethoxylated, propoxylated
	ALCOHOLS, C11 – C15 SECONDARY
	ETHOXYLATED
Other herende.	

#### 2.3 Other hazards:

Spilled liquid could present a slip hazard. Product may stain skin.

### **SECTION 3**

### **COMPOSITION / INFORMATION ON INGREDIENTS**

## 3.2 Mixtures

Ingredient Name	CAS No	EC No	REACH Registration Number	% Weight	Classification according to Regulation (EC) No 1272/2008 [CLP]	Additional information
Hydrocarbons C12-C15 n- ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	-	920- 107-4	01- 2119453414-43	< 65	Asp Tox 1 H304	EUH066
Alcohols, C12-C15, branched and linear, ethoxylated, propoxylated	120313- 48-6	-	-	< 20	Eye Dam. 1 H318 Aquatic Chronic 2 H411	None
ALCOHOLS, C11 – C15 SECONDARY ETHOXYLATED	68131- 40-8	614- 295-4	-	< 15	Eye Dam. 1 H318 Skin Irrit. 2 H315	None
2-Naphthalenamine, N-(2- ethylhexyl)-1-[[4- phenylazo)phenyl]azo]-, ar' and ar'' – Me derivs.	92257- 28-8	296- 117-1	-	< 4	Not classified	See Section 11 for information on azo dyes.
Oleic acid monoisopropanolamide	111-05- 7	-	-	< 3	Eye Dam. 1 H318 Skin Irrit. 2 H315	None
Terpineol	8000- 41-7	232- 268-1	-	< 2	Eye Irrit. 2 H319 Skin Irrit. 2 H315	None
Solvent naphtha (petroleoum), heavy arom.	64742- 94-5	265- 198-5	-	< 2	Asp Tox 1 H304 Aquatic Chronic 2 H411	None

Note: Hazard statement(s) in this section apply only to raw materials, not necessarily to finished products.

\*See Section 16 for hazard statement(s) text in full.

SECTION	4 FIRST AID MEASURES	
4.1	Description of first aid measures: General notes:	If symptoms persist, seek medical attention. Show this safety data sheet to the doctor in attendance.
	Following inhalation:	Remove to fresh air. Keep at rest. If not breathing give artificial respiration. Seek medical attention if symptoms occur.
	Following skin contact:	Flush with water, use soap if available. Contaminated clothing should be washed before re-use. Seek medical attention if symptoms occur.
	Following eye contact:	Flush eyes with large amounts of water for at least 15 minutes. Check for and remove any contact lenses if easy to do. Continue rinsing. Seek medical attention immediately.
	Following ingestion:	Rinse mouth with water. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach contents doesn't enter the lungs. Never give anything by mouth to an unconscious person. Seek medical attention immediately.
	Self-protection of the first aider:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that the mixture is still present, wear appropriate personal protective equipment.

4.2 N

## Most important symptoms, both acute and delayed:

Risk of serious damage to eyes, may cause lung damage if swallowed, no delayed effects known.

**4.3** Indication of any immediate medical attention and special treatment needed: Eye wash bottle must be readily available when product is in use.

SECTION	5 FIREFIGHTING MEASURE	S
5.1	Extinguishing media: Suitable extinguishing media:	Carbon dioxide, foam, dry chemical, water fog or spray.
5.2	Unsuitable extinguishing media: Special hazards arising from the substance or mixture: Hazardous combustion products:	Do not use water jet. Evacuate immediate area. If possible keep unaffected containers cool with water spray. Smoke, soot and oxides of carbon and nitrogen. Burning vapour may give off toxic fumes.
5.3	Advice for fire-fighter: Self contained breathing apparatus and full p Water spray should be used to cool contained	
SECTION	6 ACCIDENTAL RELEASE	MEASURES
6.1	Personal precautions, protective equipme Suitable protective equipment (see Section 8 contamination of skin, eyes and personal clot For non-emergency personnel: For emergency responders:	) should be worn to prevent any
6.2	<b>Environmental precautions:</b> Prevent liquid from entering drains, sewers a Agency or water authorities if a major spillage	unnecessary people at a safe distance.
6.3	Methods and material for containment and Eliminate sources of ignition. Take measures charge. For containment:	
6.4	<b>Reference to other sections:</b> For Personal Protective Equipment see Secti 13.	on 8. For disposal information see Section

SECTIO	N 7 HANDLING & STORAGE	
7.1	Precautions for safer handling: Protective Measures:	Wear suitable protective clothing such as chemical resistant gloves, apron and goggles/face mask to protect from splashes. Ensure adequate exhaust ventilation when in use. Avoid contact with skin and eyes. Do not breathe product spray or mist.
	Measures to prevent fire:	Keep away from sources of ignition. Take measures to prevent the build-up of electrostatic charge.
	Advice on general occupational hygiene:	Wash thoroughly after handling.
7.2	Conditions for safe storage, including any	y incompatibilities:
	Technical measures and storage conditions: Packaging materials:	Store in a cool dry area away from heat and sources of ignition. Store in original container. Keep containers
	Requirements for storage rooms and vessels:	tightly closed when not in use. Recommended storage temperature 10 °C to 30 °C. Store locked up. Keep containers out of direct sunlight.
7.3	Further information on storage conditions: Specific end use(s):	Rotate stock and check regularly for damaged items.
	Recommendations:	Use only for Non Destructive Testing (NDT) applications.
	Industrial sector specific solutions:	See product data sheet for further information.

### SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

## 8.1 Control parameters:

### Occupational exposure limit values:

Occupational exposure figures have been set for some of the components of this preparation based on GESTIS International Limit Values or manufacturers' recommendation.

		Limit valu	e - 8 hours	Limit value	- short term
Ingredient name	Country	ppm	mg /m <sup>3</sup>	ppm	mg /m <sup>3</sup>
Hydrocarbons C12-C15 n-alkanes, isoalkanes, cyclic, < 2% aromatics	Supplier's recommendation	150	1200		
Data obtained from supplier's SDS					

**Note:** Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.

**Derived No Effect Level (DNEL) –** Hydrocarbons C12-C15 n-alkanes, isoalkanes, cyclic, < 2% aromatics

End User	Exposure Route	Exposure Time	Effects	DNEL
Worker	Inhalation	Long term	Systemic	No threshold effect and/or no dose- response information available.
Worker	Inhalation	Short term	Local	No threshold effect and/or no dose- response information available.
Worker	Dermal	Long term	Systemic	No threshold effect and/or no dose- response information available.

### Derived No Effect Level (DNEL) - Terpineol

End User	Exposure Route	Exposure Time	Effects	DNEL
Worker	Inhalation	Long term	Systemic	5.8 mg/m <sup>3</sup>
Worker	Inhalation	Short term	Systemic	5.8 mg/m <sup>3</sup>
Worker	Dermal	Long term	Systemic	1.17 mg/kg bw/day
Worker	Dermal	Short term	Systemic	5 mg/kg bw/day

**Note:** The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accordance with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a government regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygenists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

### **Predicted No Effect Concentration (PNEC)**

	(1120)	
	Hydrocarbons C12-C15 n-alkanes,	Terpineol
	isoalkanes, cyclic, < 2% aromatics	
Water - Fresh Water	No data available, testing	62 µg/L
	technically not feasible.	
Water - Marine Water	No data available, testing	
	technically not feasible.	6.2 μg/L
Water - Intermittent release	No data available, testing	No data available.
	technically not feasible.	
Sediment - Fresh water	No data available, testing	
	technically not feasible.	0.442 mg/kg sediment dw
Sediment - Marine water	No data available, testing	
	technically not feasible.	0.044 mg/kg sediment dw
Soil	No data available, testing	
	technically not feasible.	0.052 mg/kg soil dw
Sewage Treatment plant	No data available, testing	2.57 mg/L
	technically not feasible.	

### 8.2 Exposure controls:

Concentrations of product vapours and mists in the working atmosphere must be kept as low as is reasonably practicable. Exposure should be minimised by the use of appropriate containment, engineering control and ventilation measures. Where this is not possible, personal protective equipment should be worn as indicated below where appropriate.

### Appropriate engineering controls:

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limits are not exceeded. Provide eye wash station.

Personal protection equipment: Eye and face protection:	Safety glasses with side-shields conforming to EN166.
Skin protection - hand:	<ul> <li>Protective gloves conforming to EN374-3.</li> <li>Use chemical resistant gloves recommended by glove manufacturer as being suitable for kerosenes if hand exposure is unavoidable.</li> <li>Protective gloves made of nitrile, neoprene or PVC are suitable, although other types may be more suitable in other circumstances.</li> <li>For prolonged exposure, recommended gloves with protective index 6, &gt; 480 minutes permeation time according to EN374.</li> <li>As the product is a preparation, consult the glove manufacturer for exact breakthrough time. Glove manufacturer's</li> </ul>
Skin protection – other:	directions for use should be observed. Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.
Respiratory protection: Thermal hazards:	In case of insufficient ventilation, wear suitable respiratory equipment. Filter type A2. (EN 136, 140, 405, 149, 143) For higher level protection use type ABEK-P3 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under CEN standards. Not applicable.
Environmental exposure controls:	Avoid any release to the environment.

### **SECTION 9**

## PHYSICAL & CHEMICAL PROPERTIES

9.1	1 Information on basic physical and chemical properties:			
	Appearance:	Dark red liquid.		
	Odour:	Mild pine.		
	Odour threshold:	No data available.		
	pH:	Neutral		
	Melting point/freezing point:	No data available.		
	Initial boiling point and boiling range:	230 °C.		
	Flash point (PMCC):	93 °C (minimum)		
	Evaporation rate (BuAC = 100):	< 0.1.		
	Flammability (solid, gas) (Limits in air):	No data available.		
	Upper/lower flammability or explosive	1 – 6% (Vol%).		
	limits:			
	Vapour pressure:	< 0.5 mm Hg @ 38 °C.		
	Vapour density (Air = 1):	> 1		
	Relative density:	0.88 g/cm <sup>3</sup>		
	Solubility:	Emulsifies.		
	Partition coefficient: n-octanol/water:	No data available.		
	Auto-ignition temperature:	> 200 °C.		
	Decomposition temperature:	No data available.		
	Viscosity (ASTM D445):	8.0 mm²/s @ 38 °C.		

Explosive properties: Oxidising properties:

No data available. No data available.

## Note: properties relate to the bulk product only unless otherwise stated.

## 9.2 Other information:

No other information.

SECTION	ECTION 10 STABILITY & REACTIVITY			
10.1	Reactivity:	No data available.		
10.2	Chemical stability	Stable under normal conditions of use and		
10.3	Possibility of hazardous reactions:	applications. No data available.		
10.4	Conditions to avoid:	Keep away from sources of ignition, hot surfaces, direct sunlight and static discharge.		
10.5	Incompatible materials:	Strong oxidizing agents. Acids and alkalis.		
10.6	Hazardous decomposition materials:	None under normal conditions of storage and use. Smoke, soot and oxides of carbon and nitrogen on combustion.		

## SECTION 11 TOXICOLOGICAL INFORMATION

**11.1** Information on toxicological effects: based on data for component materials.

Acute toxicity - oral:	Based on the available data the classification criteria are not met.
Acute toxicity – dermal:	Based on the available data the classification criteria are not met.
Acute toxicity – inhalation:	Based on the available data the classification criteria are not met.
Skin corrosion/irritation:	Skin Irrit. 2, H315: Causes skin irritation. EUH066: Repeated exposure may cause skin cracking or dryness.
Serious eye damage/irritation:	Eye Dam. 1, H318: Causes serious eye damage.
Respiratory sensitisation:	Based on tests of individual components, this preparation is not sensitising.
Skin sensitisation:	Based on tests of individual components, this preparation is not sensitising.
Germ cell mutagenicity:	Based on individual components, this preparation is not expected to show mutagenic effects.
Carcinogencity:	Based on individual components, this preparation is not expected to show carcinogenic effects.
Reproductive toxicity:	Based on individual components, this preparation is not expected to show repoductive toxicity.
STOT single exposure:	Data lacking.
STOT repeated exposure:	Data lacking.

Aspiration hazard:

	and enters airways.							
Information on likely Routes of Exposure and Potential Health Effects:								
Inhalation:	May be harmful if inhaled. Causes respiratory tract irritation.							
Ingestion:	May be harmful if swallowed. Ingestion may cause irritation of the mouth, throat and digestive tract. Small amounts of product aspirated into the respiratory system during ingestion or from vomiting may cause bronochopneumonia or pulmonary edema.							
Eye contact:	Risk of serious damage to eyes.							
Skin contact:	May be harmful if absorbed through skin. Causes skin irritation. Repeated exposure may cause skin cracking or dryness.							

Toxicity Test Results: based on data for component materials, where available.

Hydrocarbons C12-C15 n-alkanes, isoalkanes, cyclic, < 2% aromatics

Acute Toxicity – oral	LD50 (rat)	> 5000 mg/kg (OECD 401)
Acute Toxicity – dermal	LD50 (rabbit)	> 5000 mg/kg (OECD 402)
Acute Toxicity – inhalation	LC50 (rat)	4951 mg/l (vapours) 4h (OECD403)

### Alcohols, C12-C15, branched and linear, ethoxylated, propoxylated

Acute Toxicity – oral	LD50 (rat)	2,000 – 5,000 mg/kg				
Acute Toxicity – dermal	LD50 (rabbit)	Not determined				
Acute Toxicity – inhalation	LC50 (rat)	Not determined				

Alcohols, C11 – C15 secondary ethoxylated

Acute Toxicity – oral	LD50 (rat)	> 3,000 mg/kg
Acute Toxicity – dermal	LD50 (rabbit)	> 2,000 mg/kg
Acute Toxicity – inhalation	LC50 (rat)	No data.

Solvent naphtha (petroleum), heavy arom.

Acute Toxicity – oral	LD50 (rat)	5 ml/kg
Acute Toxicity – dermal	LD50 (rabbit)	> 2 ml/kg
Acute Toxicity – inhalation	LC50 (rat)	> 590 mg/m <sup>3</sup> /4 hours

### **Other Information:**

Metabolic studies on some azo-dyes, following prolonged skin or oral cavity contact, have detected reduction of azo bonds to aromatic amines. This product, therefore, could potentially metabolize to o-toluidine and o-aminoazotoluene, which have been identified as animal carcinogens, upon prolonged skin or oral cavity contact.

Asp. Tox. 1, H304: May be fatal if swallowed

### **SECTION 12**

#### ECOLOGICAL INFORMATION

## Based on data for component materials 12.1 Toxicity:

Hydrocarbons C12-C15 n-alkanes, isoalkanes, cyclic, < 2% aromatics

Fish	Onchorhynchus mykiss	LC0	96h	1000 mg/l
Aquatic Invertebrates				No data available.
Aquatic Plants				No data available
Microorganisms				No data available

### Alcohols, C12-C15, branched and linear, ethoxylated, propoxylated

Fish	Leuciscus idus	LC50	96h	1 – 10 mg/l
Aquatic Invertebrates				No data available.
Aquatic Plants	Algae	EC50	72h	Not determined
Microorganisms	Activated Sludge	EC10		> 1000 mg/l (DEV-L2)

### Alcohols, C11 - C15 secondary ethoxylated

Fish	Pimephales promelas	LC50	96h	3.5 – 4.9 mg/l
Aquatic Invertebrates	Daphnia Magna	EC50	48h	3.1 mg/l.
Aquatic Plants	Algae	EC50	72h	No data.
Microorganisms	Activated Sludge			No data.

### Solvent naphtha (petroleoum), heavy arom.

Fish	Onchorhynchus mykiss	LL50	96h	2 – 5 mg/l
Aquatic Invertebrates	Daphnia magna	EL50	48h	3 – 10 mg/l
Aquatic Plants	Raphidocelis			
	subcapitata	EL50	72h	1 – 3 mg/l
Microorganisms	Tetrahymena pyriformis	LL50	72h	677.9 mg/l

#### 12.2 Persistence and degradability: Moderately biodegradable. 12.3 **Bioaccumulative potential:** Hydrocarbons C12 - C15 n-alkanes, isoalkanes, cyclics, < 2% aromatics: no data available. The remaining substances in this mixture are not expected to be bioaccumulative. Partition coefficient: n-octanol/water Alcohols C11 - C15 secondary ethoxylated $\log Pow = 3.3 - 4.4$ (log Kow): **Bioconcentration factor (BCF):** Alcohols C11 - C15 secondary ethoxylated BCF = 15 - 6412.4 Mobility in soil: Adsorption to the solid phase is possible. 12.5 Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or vPvB 12.6 Other adverse effects: No data available.

## SECTION 13 DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods:

Dispose of waste and residues in accordance with local authority requirements. Seek the advice of an approved waste disposal contractor for disposal at a licensed facility in accordance with national legislation.

Product/packing disposal:

Empty containers may contain residue and can be dangerous. Do NOT remove

## Waste codes/waste designations according to LoW:

Empty containers may contain residue and can be dangerous. Do NOT remove labels. Hazardous waste. Waste code not assigned.

NOTE: Waste codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste code(s).

### Waste treatment – relevant information:

Dispose of waste and residues in accordance with local authority requirements. Seek the advice of an approved waste disposal contractor for disposal at a licensed facility in accordance with national legislation.

Sewage disposal – relevant information: Other disposal recommendations: Do not empty down the drain.

Use a licensed waste contractor.

SECTION 14 TRANSPORT INFORMATION					
14.1	UN number:	ADR/RID: IMDG:	-		
14.2	UN proper shipping name:	IATA: ADR/RID: IMDG:	- Not dangerous goods. Not dangerous goods.		
14.3	Transport hazard class(es):	IATA: ADR/RID: IMDG:	Not dangerous goods. - -		
14.4	Packing group:	IATA: ADR/RID: IMDG:	- - -		
14.5	Environmental hazards:	IATA: ADR/RID: IMDG:	-		
14.6	<b>Special precautions for user:</b> Not applicable.	IATA:	-		
14.7	Transport in bulk according to Annex II of Marpol 73/78 and the IBC code: Not applicable.				
SECTIC	ON 15 REGULATORY INFO	DRMATION			
15.1	Safety, health and environmental reg or mixture: EU Regulations:	gulations/legislation	n specific for the substance		
	This data sheet complies with the requ classification, labelling and packaging Safety data sheet as required by EC-R	of substances and m	ixtures.		
	Amendment (EU) No. 2015/830. Regulation (EC) No 648/2004 on deter Information according to 2013/10/EL	gents.			
	directive 75/324/EEC. Not applicable - this product is not an a National regulations (Germany):				

hazard class): TechnischeAnleitungLuft (TA-Luft):

Wassergefahrdungklasse (water

Class 5.2.5 Organic Substances, except dusts.

WGK1 - Low hazard to waters.

**15.2 Chemical safety assessment:** No chemical safety assessment has been carried out for this mixture by the supplier.

SECTION 16

**OTHER INFORMATION** 

(i) Indication of changes:

Version 17.1 updated in Section 1.4.

Vertical lines on the left hand side indicate an amendment from the previous version.

## (ii) Abbreviations and acronyms:

Appreviation	s and acronyms:			
ADR	European Agreement concerning the International Carriage of Dangerous Goods			
	by Road (Accord européen relatif au transport international des marchandises			
	Dangereuses par Route)			
CAS No.	Chemical Abstracts Service number			
CEN	European Committee for Standardisation			
CLP	Classification, Labelling Packaging Regulation; Regulation (EC) No 1272/2008			
ECHA	European Chemicals Agency			
EC50	Half Maximal Effective Concentration			
EC number	EINECS and ELINCS number			
EINECS	European Inventory of Existing Commercial Substances			
ELINCS	European List of notified Chemical Substances			
GHS	Globally Harmonized System			
IATA	International Air Transport Association			
IMDG	International Maritime Dangerous Goods			
LC50	Lethal Concentration to 50% of a test population			
LD50	Lethal Dose to 50% of a test population			
MPI	Magnetic Particle Inspection			
NDT	Non-Destructive Testing			
OEL	Occupational Exposure Limit			
PBT	Persistent, Bioaccumulative and Toxic Substance			
PMCC	Pensky-Martens closed cup method			
PPE	Personal Protection Equipment			
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation EC (No) 1907/2006			
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail			
	(Reglement International concernant le transport des marchandises Dangereuses			
	par chemin de fer)			
SDS	Safety Data Sheet			
STOT RE	Specific Target Organ Toxicity, Repeat Exposure			
STOT SE	Specific Target Organ Toxicity, Single Exposure			
TA-Luft	Technical Instructions on Air Quality Control (Technische Anleitung zur			
	Reinhaltung der Luft)			
vPvB	Very Persistent and Very Bioaccumulative			
WEL	Workplace Exposure Limit			
WGK	German Water Hazard Class (Wassergefährdungsklasse)			

### (iii) Key literature and sources of data:

- Supplier's safety data sheets for components listed in Section 3.
- European Chemicals Agency, http://echa.europa.eu/
- GESTIS International Limit Values Database,
- http://limitvalue.ifa.dguv.de/Webform\_gw.aspx
- Occupational Exposure Limits EH40/2005.
- Commission regulation (EU) 2015/830.
- Control of Substances Hazardous to Health Regulations 2002.
- Hazardous waste regulations 2005.
- Health & Safety at Work Act 1974.
- Regulation (EC) No. 1907/2006 (REACH).
- Regulation (EC) No. 1272/2008 (CLP).

# (iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP):

Classification according to Regulation (EC) No 1272/2008	Classification procedure
Asp. Tox. 1 H304	Calculation
Eye Dam. 1 H318	Calculation
Skin Irrit. 2 H315	Calculation
EUH066	Calculation

(v)	Hazard statements (number and full text):			
	H304: May be fatal if swallowed and enters airways.			
	H315: Causes skin irritation.			
	H318: Causes serious eye damage.			
	H319: Causes serious eye irritation.			
	H411: Toxic to aquatic life with long lasting effects.			
	H412: Harmful to aquatic life with long lasting effects.			
	Hazard class and categorty code (full text):			
Aquatic Chronic 2: Hazardous to the aquatic environment				
	Aquatic Chronic 3: Hazardous to the aquatic environment			
	Asp. Tox. 1: Aspiration Hazard			
	Eye Dam. 1: Serious eye damage/eye irritation			
	Eye Irrit. 2: Serious eye damage/eye irritation			
	Skin Irrit. 2: Skin corrosion/irritation			
	Relevant precautionary statements (number and full text):			
P280: Wear protective gloves/protective clothing/eye protection/face protection P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes.				
	P310: Immediately call a POISON CENTER or doctor/physician.			
	P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.			
	P331: Do NOT induce vomiting.			
	P273: Avoid release to the environment.			
	P302+352: IF ON SKIN: Wash with soap and water.			
	P332+313: If skin irritation occurs: Get medical advice/attention.			
	P362+P364: Take off contaminated clothing and wash it before reuse.			
	P405: Store locked up.			
(vi)	Training advice:			
	Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS),			
	Personal Protective Equipment (PPE) and hygiene. Chemical hazard risk assessment.			
	Provide adequate information, instruction and training to operators.			

## DISCLAIMER

The information and recommendations contained herein are based upon data believed to be up-todate and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391/EEC and 98/24/EC amended by Directive 2014/27/EU.

Revision summary:	Revision Comments	This SDS is valid from the Revision Date. If you require a SDS for the product manufactured before the revision date please contact us at datasheets@magnaflux.co.uk.
	Revision Date Version	01.01.2017 17.1