Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.:	5415-41150-8	Synthal-Diversit-Effektlack	
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Version:	1.10	Issue date: 20.12.2016	Page 1 / 8

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

1.1. **Product identifiers**

Article No. (manufacturer/supplier)	5415-41150-8
Identification of the substance or mixture	Synthal-Diversit-Effektlack Patina Kupfer

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

Relevant identified uses:
Liquid coating material

1.3 **Details of the supplier of the safety data sheet**

Company name: F H Brundle
Lamson Road
Ferry Lane North
Rainham
RM13 9YY

Tel: +44 (0) 1708 253545
Fax: +44 (0) 1708 253550
Email: sales@brundle.com

1.4 **Emergency telephone number**

Emergency tel: +44 (0) 1282 834545 (Mon-Fri 08:30-16:30) Web: www.fhbrundle.co.uk

SECTION 2: Hazards identification

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

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

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

Flam. Liq. 3 / H226	flammable liquids	Flammable liquid and vapour.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

2.2. **Label elements**

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

Hazard pictograms

Warning

Hazard statements

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do no eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.

P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use foam to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

contains:

n-butyl acetate

Supplemental Hazard information (EU)

EUH066	Repeated exposure may cause skin dryness or cracking.
EUH208	Contains Reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethanediamine; ethyl methacrylate; methyl methacrylate.May produce an allergic reaction.

2.3. **Other hazards**

No risks worthy of mention.

SECTION 3: Composition / information on ingredients

3.1. **Substances**

This product is a preparation.

3.2. **Mixtures**

Product description / chemical characterization

Description Vinyl copolymers

Hazardous ingredients

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

EC No. CAS No. INDEX No.	REACH No. Chemical name classification	Wt % Remark
204-658-1 123-86-4 607-025-00-1	01-2119485493-29-XXXX n-butyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336	10 - 25
259-370-9 54839-24-6 603-177-00-8	-/- 2-ethoxy-1-methylethyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336	10 - 25
215-535-7 1330-20-7 601-022-00-9	01-2119486136-34-XXXX xylene, mixture of isomers Flam. Liq. 3 H226 / Acute Tox. 4 H332 / Acute Tox. 4 H312 / Skin Irrit. 2 H315	10 - 25
265-199-0 64742-95-6 649-356-00-4	01-2119455851-35-XXXX Solvent naphtha (petroleum), light arom. Flam. Liq. 3 H226 / STOT SE 3 H335 / Aquatic Chronic 2 H411 / Asp. Tox. 1 H304 / STOT SE 3 H336	5 - 10
202-849-4 100-41-4 601-023-00-4	01-2119489370-35-XXXX ethylbenzene Flam. Liq. 2 H225 / Acute Tox. 4 H332 / STOT RE 2 H373 / Asp. Tox. 1 H304	2,5 - 5
203-625-9 108-88-3 601-021-00-3	01-2119471310-51-XXXX toluene Flam. Liq. 2 H225 / Repr. 2 H361 / Asp. Tox. 1 H304 / STOT RE 2 H373 / Skin Irrit. 2 H315 / STOT SE 3 H336	0,1 - 0,5
430-050-2	01-0000017633-70-XXXX Reaction product of decanoic acid, 12-hydroxystearic acid and 1,2-ethanediamine Skin Sens. 1 H317 / Aquatic Chronic 2 H411	0,1 - 0,5
202-597-5 97-63-2 607-071-00-2	 ethyl methacrylate Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H335 / Skin Irrit. 2 H315 / Skin Sens. 1 H317	0,1 - 0,5
201-297-1 80-62-6 607-035-00-6	01-2119452498-28-XXXX methyl methacrylate Flam. Liq. 2 H225 / Skin Irrit. 2 H315 / Skin Sens. 1 H317 / STOT SE 3 H335	0,1 - 0,5

Additional information
Full text of classification: see section 16

SECTION 4: First aid measures

4.1. **Description of first aid measures**

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

Following inhalation
Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact
Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion
If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

4.2. **Most important symptoms and effects, both acute and delayed**
In all cases of doubt, or when symptoms persist, seek medical advice.

4.3. **Indication of any immediate medical attention and special treatment needed**
First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

Suitable extinguishing media:
alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:
strong water jet

5.2. **Special hazards arising from the substance or mixture**
Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. **Advice for firefighters**
Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. **Personal precautions, protective equipment and emergency procedures**
Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. **Environmental precautions**
Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. **Methods and material for containment and cleaning up**
Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see chapter 13). Clean using cleansing agents. Do not use solvents.

6.4. **Reference to other sections**
Observe protective provisions (see chapter 7 and 8).

SECTION 7: Handling and storage

7.1. **Precautions for safe handling**

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only

use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to chapter 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Precautions against fire and explosion:
Vapours are heavier than air. Vapours form explosive mixtures with air.

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

Requirements for storage rooms and vessels
Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

Hints on joint storage
Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions
Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. **Specific end use(s)**
Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**
Occupational exposure limit values:

n-butyl acetate
INDEX No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4
TWA: 724 mg/m3; 150 ppm
STEL: 966 mg/m3; 200 ppm

xylene, mixture of isomers
INDEX No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7
TWA: 441 mg/m3; 100 ppm
STEL: 662 mg/m3; 150 ppm

ethylbenzene
INDEX No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4
TWA: 441 mg/m3; 100 ppm
STEL: 552 mg/m3; 125 ppm

toluene
INDEX No. 601-021-00-3 / EC No. 203-625-9 / CAS No. 108-88-3
TWA: 191 mg/m3; 50 ppm
STEL: 574 mg/m3; 150 ppm

methyl methacrylate
INDEX No. 607-035-00-6 / EC No. 201-297-1 / CAS No. 80-62-6
TWA: 208 mg/m3; 50 ppm
STEL: 416 mg/m3; 100 ppm

Additional information
TWA : long-term occupational exposure limit value
STEL : short-term occupational exposure limit value
Ceiling : peak limitation

8.2. **Exposure controls**
Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection
If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection
For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)
Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles DIN EN 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection
Wear closely fitting protective glasses in case of splashes.

Protective clothing
Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures
After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls
Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

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

Appearance:

Physical state	liquid
Colour	refer to label
Odour	characteristic

Safety relevant basis data		Unit	Method	Remark
Flash point:	23	°C		
Ignition temperature in °C:	325	°C		
Lower explosion limit:	0,8	Vol-%		
Upper explosion limit:	9,8	Vol-%		
Vapour pressure at 20 °C:	4,0368			
Density at 20 °C:	1,06	g/cm³		
Water solubility (g/L):	insoluble			
pH at 20 °C:	--			
Viscosity at 20 °C:	90 s 4 mm		DIN 53211	
Solvent separation test (%):	< 3	%	ADR/RID	
Solid content (%):	40	Wt %		
solvent content:				
Organic solvents:	60	Wt %		
Water:	0	Wt %		

9.2. **Other information**
No data available.

SECTION 10: Stability and reactivity

10.1. **Reactivity**
No data available.

10.2. **Chemical stability**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7.

10.3. **Possibility of hazardous reactions**
Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. **Conditions to avoid**
Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**

No data available.

10.6. **Hazardous decomposition products**
Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

Classification according to Regulation (EC) No. 1272/2008 [CLP]
No data on preparation itself available.

11.1. **Information on toxicological effects**

Acute toxicity

Toxicological data are not available.

skin corrosion/irritation; Serious eye damage/eye irritation

Toxicological data are not available.

Respiratory or skin sensitisation

Toxicological data are not available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Toxicological data are not available.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

Other observations:
Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

SECTION 12: Ecological information

overall evaluation
Classification according to Regulation (EC) No. 1272/2008 [CLP]
There is no information available on the preparation itself .
Do not allow to enter into surface water or drains.

12.1. **Toxicity**
Toxicological data are not available.

12.2. **Persistence and degradability**
Toxicological data are not available.

12.3. **Bioaccumulative potential**
Toxicological data are not available.

12.4. **Mobility in soil**
Toxicological data are not available.

12.5. **Results of PBT and vPvB assessment**
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. **Other adverse effects**
No data available.

SECTION 13: Disposal considerations

13.1. **Waste treatment methods**

Appropriate disposal / Product
Recommendation
Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC
080111 waste paint and varnish containing organic solvents or other dangerous substances

packaging
Recommendation
Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. **UN number**

UN 1263

14.2. **UN proper shipping name**

Land transport (ADR/RID):	Paint
Sea transport (IMDG):	PAINT
Air transport (ICAO-TI / IATA-DGR):	Paint

14.3. **Transport hazard class(es)**

Land transport (ADR/RID):	not a good of Class 3 in containers > 450 l class 3
Sea transport (IMDG)	3
for packages < 30 litres:	Transport in accordance with 2.3.2.5 ofthe IMDG Code.
Air transport (ICAO-TI / IATA-DGR)	3

14.4. **Packing group**

III

14.5. **Environmental hazards**

Land transport (ADR/RID)	not applicable
Marine pollutant	not applicable

14.6. **Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

tunnel restriction code	D/E

Sea transport (IMDG)

EmS-No.	F-E, S-E

14.7. **Transport in bulk according to Annex II of MARPOL and the IBC Code**

not applicable

SECTION 15: Regulatory information

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

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).
VOC-value (in g/L) ISO 11890-2: 642

National regulations

Restrictions of occupation
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. **Chemical Safety Assessment**

For the following substances of this preparation a chemical safety assessment has been carried out:

EC No. CAS No.	Chemical name	REACH No.
215-535-7 1330-20-7	xylene, mixture of isomers	01-2119486136-34-XXXX

SECTION 16: Other information

Full text of classification in section 3:

Flam. Liq. 3 / H226	flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
STOT RE 2 / H373	Specific target organ toxicity (repeated exposure)	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Repr. 2 / H361	Reproductive toxicity	Suspected of damaging the unborn child.
Skin Sens. 1 / H317	respiratory or skin sensitisation	May cause an allergic skin reaction.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Additional information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

Whilst every effort has been made to ensure the accuracy of the information supplied. F.H. Brundle cannot be held responsible for any errors or omissions. This product must only be employed for its original intended use. Any other use is wrong and potentially dangerous. Installation must be carried out in full compliance with current regulations. F.H. Brundle cannot be held liable for any damages resulting from wrongful, erroneous or negligent use.

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