

**Material Safety Data Sheet**  
Safety data sheet according to Regulation (EC) No. 1907/2006

Product name: **HB540 .5L PHTHALO GREEN 1**  
Product code : **AT28-6540 RM93**  
Printing date : 12.11.2011  
Revision date : 04.11.2011

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## 01 Identification of the substance/mixture and of the company/undertaking

### Product identifier

HB540 .5L PHTHALO GREEN 1  
AT28-6540 RM93  
53207907

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

Car refinishing products

### Customer article no

### Details of the supplier of the safety data sheet

R-M Automotive Refinish Ltd  
Unit 101 10th Avenue  
Deeside Ind. Park, Flintshire CH5 2UA  
Great Britain

### E-mail address

Product-Safety-Coatings@basf.com

### Emergency phone

+44 12 44 281 315

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## 02 Hazards Identification

### Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC

- Flammable.
- Harmful by inhalation, in contact with skin and if swallowed.
- Irritating to eyes and skin.

### Label elements

According to Directive 67/548/EEC respectively 1999/45/EC ( Annex V, Section A and B)

Danger symbol: **Xn**

Danger classification:

### Harmful

Product contains:

### 2-butoxyethanol

### Risk Warnings

**R10**

Flammable.

**R20/21/22**

Harmful by inhalation, in contact with skin and if swallowed.

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**R36/38**

Irritating to eyes and skin.

**Labelling for Industrial Users**

**S23**

Do not breathe spray dust/solvent vapour.

**S36/37**

Wear suitable protective clothing and gloves.

**S38**

In case of insufficient ventilation, wear suitable respiratory equipment.

**Other hazards**

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### 03 Composition/Information on Ingredients

**Substances**

not applicable

**Mixtures**

Chemical nature

polyurethane, organic solvent, pigment

Hazardous ingredients

according to Regulation (EC) No. 1272/2008

CAS no.	EINECS no.	REACH no.	INDEX no.
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% (weight)

**Hazard Statement**

**2-butoxyethanol**

111-76-2                      203-905-0

30,0 - < 50,0

603-014-00-0

H302 H312 H332 H315 H319

- Acute toxicity oral Category 4
- Acute toxicity dermal Category 4
- Acute toxicity Inhalation - vapour Category 4
- Skin corrosion/irritation Category 2
- Serious eye damage/eye irritation Category 2

**sec-butanol**

78-92-2                      201-158-5

15,0 - < 20,0

603-127-00-5

H226 H319 H335 H336

- Flammable liquids Category 3
- Serious eye damage/eye irritation Category 2

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- Specific target organ toxicity following single exposure irritating to respiratory system Category 3
- Specific target organ toxicity following single exposure Vapours may cause drowsiness and dizziness. Category 3

**2,4,7,9-tetramethyl-5-decine-4,7-diol**

126-86-3 204-809-1

3,0 - < 5,0

H318 H402 H412

- Serious eye damage/eye irritation Category 1
- Acute hazards to the aquatic environment Category 3
- Chronic hazards to the aquatic environment Category 3

Hazardous ingredients  
according to Directive 1999/45/EC

CAS no. % (weight)	EINECS no. Symbol	REACH no. R phrases	INDEX no.
<b>2-butoxyethanol</b> 111-76-2 30,0 - < 50,0	203-905-0 Xn	20/21/22-36/38	603-014-00-0
<b>sec-butanol</b> 78-92-2 15,0 - < 20,0	201-158-5 Xi	10-36/37-67	603-127-00-5
<b>2,4,7,9-tetramethyl-5-decine-4,7-diol</b> 126-86-3 3,0 - < 5,0	204-809-1 Xi	41-52/53	

The wording of the hazard symbols, R-phrases and H-statements is specified in chapter 16 if dangerous ingredients are mentioned.

## 04 First Aid Measures

### Description of first aid measures

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

If inhaled

Remove patient to fresh air and seek medical assistance. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position.

On skin contact

Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. Do NOT use solvents or thinners.

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On contact with eyes

Contact lenses should be removed. Hold eyelids open and flush with copious amounts of clean, fresh water or a special eyewash solution and seek medical advice.

On ingestion

If swallowed, rinse mouth with plenty of water (only if the person is conscious) and seek medical advice immediately. Keep the injured person at rest. Do not induce vomiting.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

**Indication of any immediate medical attention and special treatment needed**

No data available.

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## 05 Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media

Foam (alcohol resistant), carbon dioxide, powders, water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Unsuitable extinguishing media for safety reasons

Water jet

### Special hazards arising from the substance or mixture

Due to the organic compound content of the preparation, fire will produce dense black smoke. Inhalation of dangerous decomposition products may cause serious damage to health.

### Advice for fire-fighters

Special protective equipment

Appropriate breathing apparatus may be required.

Additional information

Cool closed containers in the vicinity of the source of fire.

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## 06 Accidental Release Measures

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**Personal precautions, protective equipment and emergency procedures**

Due to the organic solvents' content of the product, exclude sources of ignition and ventilate area. Avoid breathing vapours.

**Environmental precautions**

Do not allow to enter drains or watercourses. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the Environment Agency.

**Methods and material for containment and cleaning up**

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal according with the waste regulations (see section 13). Clean preferably with a detergent; avoid the use of solvents.

**Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## **07 Handling and Storage**

**Precautions for safe handling**

Instructions for Safe Handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.

Avoid skin and eye contact. Avoid inhalation of vapour and spray mist.

Avoid inhalation of dust from sanding.

Smoking, eating and drinking are forbidden in application area. For personal protection see section 8. Comply with the health and safety at work laws.

Isolate from sources of heat, sparks and open flame. Do not use any sparking tools.

Product may charge electrostatically: always use earthing leads when transferring from one container to another and earth containers. It is recommended that operators should wear

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antistatic clothing and footwear.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

The Manual Handling Operations Regulations 90/269/EEC may apply to the handling of packages of this product. Refer to the guide weight indicated on the package when carrying out assessments. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in Section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.

Information on Fire and Explosion Protection

Solvent vapours are heavier than air and spread along floors. Vapour forms explosive mixtures with air.

Keep container dry and tightly closed in a cool well-ventilated place.

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

Requirements for Storage Areas and Containers

Electrical equipment must be explosion-proof to the appropriate standard. Floors must be of conducting type and impermeable to the materials being stored.

Keep container tightly closed. Never use pressure to empty; container is not a pressure vessel. Close containers carefully once opened and store upright in order to prevent any leakage. No smoking. Prevent unauthorized access.

Information on Combined Storage

Keep away from oxidising agents, from strongly alkaline and strongly acid materials.

Additional Information on Storage Conditions

Always keep in containers of same material as the original one. Observe label precautions. Store in a dry, well ventilated place away from sources of heat and direct sunlight. Keep away from sources of ignition.

Storage temperature : n.d.a.

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**Specific end use(s)**

Detailed information can be gained from the relevant technical data sheets.

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**08 Exposure Controls/Personal Protection**

**Control parameters**

**Occupational Exposure Limits**

CAS no.	limit values	
	ml/m3 (ppm)	mg/m3
<b>sec-butanol</b>		
78-92-2	WEL-L	- 308
	WEL-S	- 462

**Exposure controls**

**Engineering Measures**

Provide adequate ventilation. This can be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations at the workplace below the occupational exposure limits, appropriate certified respirators must be worn.

**Personal protective equipment**

All personal protective equipment, including respiratory protective equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the Personal Protective Equipment at Work Regulations 1992 and the COSHH Regulations.

Respiratory Protection

When workers are facing concentrations above the occupational exposure limits they must use appropriate certified respirators.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet (sanding/flatting) should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Use A1P2 breathing-protection half mask in case of contact with aerosols.

Hand Protection

Wear protective gloves.

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Any chemical protection glove certified according to EN 374 is suitable: e.g. butyl rubber gloves

Material thickness: = 0,5 mm

Further information on penetration time is available from the manufacturer of the glove.

Data are based on information from the glove manufacturer, the raw material manufacturer or according to specifics of the product components.

The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties).

Follow manufacturer's advice on use, storage, maintenance and replacement of gloves.

The gloves should be replaced immediately in case of damage or signs of wear. It is recommended to use preventative skin protection (skin cream).

Eye Protection

Required when there is a risk of eye contact.

Use tight-fitting protective goggles.

Skin Protection

Personnel should wear antistatic, flame-retardant clothing made of natural fibres and/or heat-resistant synthetic fibres.

**Environmental exposure controls**

see section 7 and 12

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**09 Physical and Chemical Properties**

Physical state : liquid  
Colour : green  
Odour : specific  
pH : n.d.a.  
Change in physical state  
Boiling temperature/range : n.d.a.  
Melting point/range : n.d.a.



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Flash point : +035 °C ISO 3679  
Ignition temperature : > 200 °C  
solvents  
Explosion limits, lower : > 35 g/m3  
upper : n.d.a.  
Vapour pressure : n.d.a.  
Density : 0,990 g/cm3 at 20°C  
Solubility in water : miscible  
Viscosity : >060/6 s at 20°C ISO 2431

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## 10 Stability and Reactivity

### Reactivity

Stable under recommended storage and handling conditions (see section 7).

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

### Conditions to avoid

### Incompatible materials

Keep away from highly acidic or alkaline substances as well as oxidants in order to prevent exothermal reactions.

### Hazardous decomposition products

When exposed to high temperatures hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, monomeric isocyanates may be produced.

In case of fire may produce hydrogen halide vapours.

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## 11 Toxicological Information

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The preparation has been assessed following the conventional method of the Dangerous Preparation Directive 1999/45/EC. See Sections 3 and 15 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated and prolonged exposure to solvents at levels significantly above OELs may lead to the development of long-lasting central nervous system disorders such as chronic toxic encephalopathy, signs of toxicity include changes in behaviour and memory.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

The liquid splashed in the eyes may cause irritation and reversible damage.

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## 12 Ecological Information

### General

There are no test results available for this product.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

The product should not be allowed to enter drains or water courses.

The Air Pollution Control requirements of regulations made under the Environmental Protection Act may apply to the use of this product.

### Persistence and degradability

Biological degradability of hazardous substances mentioned in section 3:

CAS no.	test method	biological degradability %
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**2,4,7,9-tetramethyl-5-decine-4,7-diol**  
126-86-3                      OECD 301 B                      5

**Other adverse effects**

The product contains organic halogen compounds which may contribute to the AOX value.

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## 13 Disposal Considerations

### Waste treatment methods

Observe national and local legal requirements.

Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act. Using information provided in this data sheet, advice should be obtained from the Environment Agency whether the special waste regulations apply.

### European list of wastes

Commission Decision 2000/532/EC dated 3rd May, 2000

#### 08 01 11\*

Waste from the manufacture, formulation, supply and use (MFSU) and removal of paint and varnish;  
waste paint and varnish containing organic solvents or other dangerous substances

Any waste marked with an asterisk (\*) is considered as a hazardous waste pursuant to Directive 91/689/EEC on hazardous waste.

### Contaminated packaging

#### Recommendation

Containers which are not properly emptied must be disposed pursuant to Directive 91/689/EEC

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## 14 Transport Information

### Transport by Road or Rail

UN 1263, Paint, 3, III, (D/E), ADR/RID  
Special provision 640 E  
Hazard identification number 30

### Sea Transport

UN 1263, PAINT, 3, III  
EMS: F-E, S-E

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**Air Transport**

UN 1263, PAINT, 3, III

**Additional Information**

"NOT CLASS 3 GOODS" in containers of less than 450 litres; ADR

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accident or spillage.

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## 15 Regulatory Information

**Information pursuant to VOC Directive 1999/13/EC** (for product as supplied)

Volatile organic solvents: 51 %  
VOC : 51 %  
Volatile CMR substances : n.a.  
Volatile halogenated substances labelled with R40:  
n.a.

**Details relating to the VOC Directive 2004/42/EC**

Subcategory as indicated in Annex IIB : d  
Limit value for maximum VOC content  
as specified in Annex IIB : 420 g/l  
VOC content of the ready-for-use product  
according to ISO 11890-2 : 419 g/l

**National Regulations**

The Control of Substances Hazardous to Health Regulations 2002  
The Manual Handling Operations Regulations 1992  
Storage of Packaged Dangerous Substances, HS(G)71  
The Environmental Protection Act  
The Highly Flammable Liquids and Liquefied Petroleum Gases  
Regulations 1972 (SI 1972:917)  
Storage of Flammable Liquids in Containers, HS(G)51

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## 16 Other Information

Restricted to professional users.

This Safety Data Sheet is prepared in accordance with Regulation (EC) No 1907/2006, Annex II.

The information contained in this safety data sheet does not relieve users from the obligation to carry out their own risk assessment according to Directive 98/24/EC.

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Full text of risk warnings for components listed in section 3

**R10**

Flammable.

**R20/21/22**

Harmful by inhalation, in contact with skin and if swallowed.

**R36/37**

Irritating to eyes and respiratory system.

**R36/38**

Irritating to eyes and skin.

**R41**

Risk of serious damage to eyes.

**R52/53**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**R67**

Vapours may cause drowsiness and dizziness.

**H226**

Flammable liquid and vapour.

**H302**

Harmful if swallowed.

**H312**

Harmful in contact with skin.

**H315**

Causes skin irritation.

**H318**

Causes serious eye damage.

**H319**

Causes serious eye irritation.

**H332**

Harmful if inhaled.

**H335**

May cause respiratory irritation.

**H336**

May cause drowsiness or dizziness.

**H402**

Harmful to aquatic life.

**H412**

Harmful to aquatic life with long lasting effects.

**Xn** Harmful

**Xi** Irritant

For multi-pack systems observe material safety data sheets of all components.

Explanation of abbreviations:

**n.d.a.** no data available

**n.a.** not applicable

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**WEL-L** Workplace exposure limit - long

**WEL-S** Workplace exposure limit - short

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The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.