SAFETY DATA SHEET

Date of issue/Date of revision : 8 November 2015 **Version** : 8

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

1.1 Product identifier

Product name : HS Clearcoat

Product code : P190-6560/E5

Other means of identification : Not available.

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

Product use : Industrial applications.

Use of the substance/ mixture : Coating.

1.3 Details of the supplier of the safety data sheet

PPG Industries (UK) Ltd.
Needham Road, Stowmarket, Suffolk, IP14 2AD, UK
Tel: +44 (0) 1449 613161

e-mail address of person responsible for this SDS : EurMsdsContact@ppg.com

National contact

Nexa Autocolor, Customer Service and Sales Group,
Needham Road, Stowmarket, Suffolk, IP14 2AD, UK
Tel: +44 (0) 1449 771771

1.4 Emergency telephone number

Supplier

Telephone number :

- Company emergency telephone number : +44 (0) 1449 613161

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226
Skin Irrit. 2, H315
Eye Irrit. 2, H319
STOT SE 3, H335
STOT RE 2, H373
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms :

Signal word : Warning

Hazard statements : Flammable liquid and vapour.
Causes serious eye irritation.
Causes skin irritation.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapour.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage : Store in a well-ventilated place. Keep cool.

Disposal : Not applicable.

Hazardous ingredients : xylene
4-methylpentan-2-one
Solvent naphtha (petroleum), light arom. Nota(s) P

Supplemental label elements : Contains methacrylic acid, monoester with propane-1,2-diol, methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate and bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic reaction.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	% by weight	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥13 - <17	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 (central nervous system (CNS), kidneys and liver) Asp. Tox. 1, H304	[1] [2]
5-methylhexan-2-one	REACH #: 01-2119472300-51 EC: 203-737-8 CAS: 110-12-3 Index: 606-026-00-4	≥1 - <13	Flam. Liq. 3, H226 Acute Tox. 4, H332	[1] [2]
2-butoxyethyl acetate	REACH #: 01-2119475112-47 EC: 203-933-3 CAS: 112-07-2 Index: 607-038-00-2	≥1 - <7	Acute Tox. 4, H312 Acute Tox. 4, H332	[1] [2]
4-methylpentan-2-one	REACH #: 01-2119473980-30 EC: 203-550-1 CAS: 108-10-1 Index: 606-004-00-4	≥5.1 - <6.9	Flam. Liq. 2, H225 Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE 3, H335 EUH066	[1] [2]
heptan-2-one	EC: 203-767-1 CAS: 110-43-0 Index: 606-024-00-3	≥1 - <6	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H332	[1] [2]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥0.1 - <9	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1 - <3	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	[1] [2]
Solvent naphtha (petroleum), light arom. Nota(s) P	EC: 265-199-0 CAS: 64742-95-6 Index: 649-356-00-4	≥2.1 - <4.9	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
acetone	REACH #: 01-2119471330-49 EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8	≥1 - <3	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
2-(2H-benzotriazol-2-yl)-4, 6-ditertpentylphenol	EC: 247-384-8 CAS: 25973-55-1	≥0.1 - <1	STOT RE 2, H373 (oral) Aquatic Chronic 4, H413	[1] [3] [4]
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	EC: 255-437-1 CAS: 41556-26-7	≥0.2 - <1	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]

SECTION 3: Composition/information on ingredients

methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	EC: 280-060-4 CAS: 82919-37-7	≥0.1 - <0.4	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
methacrylic acid, monoester with propane-1,2-diol	REACH #: 01-2119490226-37 EC: 248-666-3 CAS: 27813-02-1	≥0.1 - <1	Eye Irrit. 2, H319 Skin Sens. 1, H317 **See Section 16 for the full text of the H statements declared above.**	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause respiratory irritation.

Skin contact : Causes skin irritation. Defatting to the skin.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

SECTION 4: First aid measures

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

5.3 Advice for firefighters

Special precautions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

SECTION 7: Handling and storage

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities : Storage temperature: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 441 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
5-methylhexan-2-one	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 475 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 95 mg/m³ 8 hours. TWA: 20 ppm 8 hours.
2-butoxyethyl acetate	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 50 ppm 15 minutes. TWA: 20 ppm 8 hours.
4-methylpentan-2-one	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 416 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 208 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
heptan-2-one	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 475 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes.

SECTION 8: Exposure controls/personal protection

	TWA: 237 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
n-butyl acetate	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** STEL: 966 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 724 mg/m³ 8 hours. TWA: 150 ppm 8 hours.
ethylbenzene	**EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.** STEL: 552 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 441 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
acetone	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** STEL: 3620 mg/m³ 15 minutes. STEL: 1500 ppm 15 minutes. TWA: 1210 mg/m³ 8 hours. TWA: 500 ppm 8 hours.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
xylene	DNEL	Short term Inhalation	289 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	289 mg/m³	Workers	Local
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	174 mg/m³	Consumers	Systemic
	DNEL	Short term Inhalation	174 mg/m³	Consumers	Local
	DNEL	Long term Dermal	108 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	14.8 mg/m³	Consumers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	Consumers	Systemic
2-butoxyethyl acetate	DNEL	Long term Inhalation	133 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	333 mg/m³	Workers	Local

SECTION 8: Exposure controls/personal protection

	DNEL	Long term Dermal	169 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	120 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	80 mg/m³	Consumers	Systemic
	DNEL	Short term Inhalation	200 mg/m³	Consumers	Local
	DNEL	Long term Dermal	102 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Dermal	72 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	8.6 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Oral	36 mg/kg bw/day	Consumers	Systemic
n-butyl acetate	DNEL	Long term Inhalation	480 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	960 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	480 mg/m³	Workers	Local
	DNEL	Short term Inhalation	960 mg/m³	Workers	Local
	DNEL	Long term Inhalation	102.34 mg/m³	Consumers	Systemic
	DNEL	Short term Inhalation	859.7 mg/m³	Consumers	Systemic
	DNEL	Long term Inhalation	102.34 mg/m³	Consumers	Local
	DNEL	Short term Inhalation	859.7 mg/m³	Consumers	Local

PNECs

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
xylene	-	Fresh water	0.327 mg/l	-
	-	Marine water	0.327 mg/l	-
	-	Sewage Treatment Plant	6.58 mg/l	-
	-	Fresh water sediment	12.46 mg/kg dwt	-
	-	Marine water sediment	12.46 mg/kg dwt	-
	-	Soil	2.31 mg/kg	-
2-butoxyethyl acetate	-	Fresh water	0.304 mg/l	-
	-	Marine water	0.0304 mg/l	-
	-	Fresh water sediment	2.03 mg/kg dwt	-
	-	Marine water sediment	0.203 mg/kg dwt	-
	-	Soil	0.42 mg/kg dwt	-
	-	Sewage Treatment Plant	90 mg/l	-
n-butyl acetate	-	Fresh water	0.18 mg/l	-
	-	Marine water	0.018 mg/l	-
	-	Fresh water sediment	0.981 mg/kg	-
	-	Marine water sediment	0.0981 mg/kg	-
	-	Sewage Treatment Plant	35.6 mg/l	-
	-	Soil	0.0903 mg/kg	-

SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : For prolonged or repeated handling, use the following type of gloves:

Not recommended: natural rubber (latex)
May be used: polyvinyl alcohol (PVA), Viton®, butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	:	Liquid.
Colour	:	Colourless.
Odour	:	Characteristic.
Odour threshold	:	Not available.
pH	:	Not available.
Melting point/freezing point	:	Not available.
Initial boiling point and boiling range	:	>37.78°C
Flash point	:	Closed cup: 24°C
Evaporation rate	:	Not available.
Material supports combustion.	:	Yes.
Flammability (solid, gas)	:	Not available.
Upper/lower flammability or explosive limits	:	Lower: 1% Upper: 13%
Vapour pressure	:	Highest known value: 24 kPa (180 mm Hg) (at 20°C) (acetone). Weighted average: 1.47 kPa (11.03 mm Hg) (at 20°C)
Vapour density	:	Highest known value: 5.5 (Air = 1) (2-butoxyethyl acetate). Weighted average: 3.93 (Air = 1)
Relative density	:	0.93
Solubility(ies)	:	Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (40°C): >0.21 cm^2/s
Viscosity	:	< 30 s (ISO 6mm)
Explosive properties	:	Not available.
Oxidising properties	:	Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	The product is stable.
10.3 Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	:	When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.

SECTION 10: Stability and reactivity

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Gas.	Rat	6670 ppm	4 hours
	LC50 Inhalation Vapour	Rat	5000 ppm	4 hours
	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
5-methylhexan-2-one	LD50 Dermal	Rabbit	8.14 g/kg	-
	LD50 Oral	Rat	3200 mg/kg	-
2-butoxyethyl acetate	LD50 Dermal	Rabbit	1.48 g/kg	-
	LD50 Oral	Rat	1.6 g/kg	-
4-methylpentan-2-one	LC50 Inhalation Vapour	Rat	32772 mg/m³	4 hours
	LD50 Oral	Rat	2.08 g/kg	-
heptan-2-one	LD50 Dermal	Rabbit	10.206 g/kg	-
	LD50 Oral	Rat	1.6 g/kg	-
n-butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
	LC50 Inhalation Vapour	Rat	2000 ppm	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10.768 g/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	4000 ppm	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
Solvent naphtha (petroleum), light arom. Nota (s) P	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
acetone	LC50 Inhalation Vapour	Rat	76000 mg/m³	4 hours
	LD50 Dermal	Rabbit	20 g/kg	-
	LD50 Oral	Rat	1.8 g/kg	-
2-(2H-benzotriazol-2-yl)-4, 6-ditertpentylphenol	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	3.125 g/kg	-
methyl 1,2,2,6, 6-pentamethyl-4-piperidyl sebacate	LD50 Oral	Rat	3.125 g/kg	-
methacrylic acid, monoester with propane-1,2-diol	LD50 Oral	Rat	11200 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Route	ATE value
Oral	32419.7 mg/kg
Dermal	6266.8 mg/kg
Inhalation (vapours)	26.39 mg/l

SECTION 11: Toxicological information

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	Not applicable.	Respiratory tract irritation
4-methylpentan-2-one	Category 3	Not applicable.	Respiratory tract irritation
n-butyl acetate	Category 3	Not applicable.	Narcotic effects
Solvent naphtha (petroleum), light arom. Nota(s) P	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
acetone	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 2	Not determined	central nervous system (CNS), kidneys and liver
ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard

Product/ingredient name	Result
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light arom. Nota(s) P	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Inhalation : May cause respiratory irritation.

Ingestion : No known significant effects or critical hazards.

Skin contact : Causes skin irritation. Defatting to the skin.

Eye contact : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

SECTION 11: Toxicological information

Ingestion : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 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 effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.
Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.
If splashed in the eyes, the liquid may cause irritation and reversible damage.
Ingestion may cause nausea, diarrhea and vomiting.
This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate, methacrylic acid, monoester with propane-1,2-diol. May produce an allergic reaction.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute LC50 150 to 200 mg/l Fresh water	Fish - Lepomis macrochirus - Young of the year	96 hours
2-(2H-benzotriazol-2-yl)-4, 6-ditertpentylphenol	Acute EC50 >10 mg/l	Algae	72 hours
	Acute LC50 >100 mg/l	Fish - brachydanio rerio	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-	-	Readily
ethylbenzene	-	-	Readily
acetone	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
xylene	3.16	7.4 to 18.5	low
5-methylhexan-2-one	1.88	-	low
2-butoxyethyl acetate	1.51	-	low
4-methylpentan-2-one	1.31	-	low
heptan-2-one	1.98	-	low
n-butyl acetate	1.78	-	low
ethylbenzene	3.15	79.43	low
acetone	-0.24	3	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

SECTION 13: Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)	
Container	15 01 04	metallic packaging

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	Yes.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	Not applicable.

Additional information

ADR/RID : None identified.

Tunnel code : (D/E)

ADN : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.

IMDG : None identified.

IATA : None identified.

14. Transport information

Special precautions for user : **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 an accident or spillage.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
2-(2H-benzotriazol-2-yl)-4, 6-ditertpentylphenol; UV-328	PBT	Candidate	ED/108/2014	12/17/2014
-	vPvB	Candidate	ED/108/2014	12/17/2014

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

15.2 Chemical Safety Assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Full text of abbreviated H statements :
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 (oral) Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H312 (dermal) Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H332 (inhalation) Harmful if inhaled.

SECTION 16: Other information

H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H373 (central nervous system (CNS), kidneys and liver)	May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys and liver)
H373 (hearing organs)	May cause damage to organs through prolonged or repeated exposure. (hearing organs)
H373 (oral)	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Full text of classifications [CLP/GHS] :

Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Acute 1, H400	ACUTE AQUATIC HAZARD - Category 1
Aquatic Chronic 1, H410	LONG-TERM AQUATIC HAZARD - Category 1
Aquatic Chronic 2, H411	LONG-TERM AQUATIC HAZARD - Category 2
Aquatic Chronic 3, H412	LONG-TERM AQUATIC HAZARD - Category 3
Aquatic Chronic 4, H413	LONG-TERM AQUATIC HAZARD - Category 4
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1, H317	SKIN SENSITIZATION - Category 1
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
STOT RE 2, H373 (central nervous system (CNS), kidneys and liver)	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS), kidneys and liver) - Category 2
STOT RE 2, H373 (hearing organs)	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2
STOT RE 2, H373 (oral)	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (oral) - Category 2
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

History

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Prepared by : EHS

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SECTION 16: Other information

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.