



SAFETY DATA SHEET

ES-AS Scratch Resistant Clearcoat

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

1.1 Product identifier

Product name : EC-AS Scratch Resistant Clearcoat
Product description : Not available.
Product type : Liquid.

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

Identified uses
Uses in Coatings - Clearcoat

1.3 Details of the supplier of the safety data sheet

International Applications Ltd
18 Wildmere Road
Wildmere Industrial Estate
Banbury
Oxfordshire
OX16 3JU
Tel.: +44 (0) 1295 274004

e-mail address of person responsible for this SD : sales@international-applications.com

1.4 Emergency telephone number

Telephone number : Call: +44 (0) 1295 274004

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
STOT SE 3, H336

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

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R10
R66, R67

SECTION 2: Hazards identification

Physical/chemical hazards : Flammable.

Human health hazards : Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

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

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

2.2 Label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Flammable liquid and vapour.
May cause drowsiness or dizziness.

Precautionary statements

Prevention : Wear protective gloves. Wear eye/face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage : Keep cool.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : n-butyl acetate

Supplemental label elements : Contains Hydroxyphenyl-benzotriazole derivate I, Hydroxyphenyl-benzotriazole derivate II 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 : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	w%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥25 - <50	R10 R66, R67	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥5 - <8	R10 Xn; R20/21 Xi; R38	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 Asp. Tox. 1, H304	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1 - <1.9	F; R11 Xn; R20, R48/20, R65	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
2-butoxyethyl acetate	REACH #: 01-2119475112-47 EC: 203-933-3 CAS: 112-07-2 Index: 607-038-00-2	≥1 - <3	Xn; R20/21	Acute Tox. 4, H312 Acute Tox. 4, H332	[1] [2]
Hydroxyphenyl- benzotriazole derivate I	REACH #: 01-0000015075-76 CAS: 104810-48-2	≥0.3 - <1	R43 N; R51/53	Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
Hydroxyphenyl- benzotriazole derivate II	REACH #: 01-0000015075-76 CAS: 104810-47-1	≥0.1 - <0.3	R43 N; R51/53	Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
bis(1,2,2,6, 6-pentamethyl- 4-piperidyl) sebacate	EC: 255-437-1 CAS: 41556-26-7	≥0.1 - <0.2	R43 N; R50/53 See Section 16 for the full text of the R-phrases declared above.	Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 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, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

SECTION 3: Composition/information on ingredients

- [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.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- 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

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 Hydroxyphenyl-benzotriazole derivate I, Hydroxyphenyl-benzotriazole derivate II, bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic reaction.

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.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
- 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

- : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

- : 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 (see Section 13). Preferably clean with a detergent. Avoid using solvents.

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

- : Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from

SECTION 7: Handling and storage

sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

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.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Seveso Directive - Reporting thresholds (in tonnes)

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b	5000	50000
C6: Flammable (R10)	5000	50000

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

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	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values STEL: 442 mg/m ³ , 0 times per shift, 15 minutes. STEL: 100 ppm, 0 times per shift, 15 minutes. TWA: 221 mg/m ³ , 0 times per shift, 8 hours. TWA: 50 ppm, 0 times per shift, 8 hours.
ethylbenzene	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values STEL: 884 mg/m ³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 442 mg/m ³ 8 hours.

SECTION 8: Exposure controls/personal protection

2-butoxyethyl acetate

TWA: 100 ppm 8 hours.
EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values
 STEL: 333 mg/m³ 15 minutes.
 STEL: 50 ppm 15 minutes.
 TWA: 133 mg/m³ 8 hours.
 TWA: 20 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/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
n-butyl acetate	DNEL	Short term Inhalation	960 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	960 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	480 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	480 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	859.7 mg/m ³	Consumers	Systemic
	DNEL	Short term Inhalation	859.7 mg/m ³	Consumers	Local
	DNEL	Long term Inhalation	102.34 mg/m ³	Consumers	Systemic
	DNEL	Long term Inhalation	102.34 mg/m ³	Consumers	Local
xylene	DNEL	Short term Inhalation	289 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	289 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
	DNEL	Short term Inhalation	174 mg/m ³	Consumers	Local
	DNEL	Short term Inhalation	174 mg/m ³	Consumers	Systemic
	DNEL	Long term Inhalation	14.8 mg/m ³	Consumers	Systemic
	DNEL	Long term Dermal	108 mg/kg	Consumers	Systemic
ethylbenzene	DNEL	Long term Oral	1.6 mg/kg	Consumers	Systemic
	DNEL	Long term Inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	15 mg/m ³	Consumers	Systemic
	DNEL	Long term Oral	1.6 mg/kg	Consumers	Systemic
	DNEL	Long term Oral	1.6 mg/kg	Consumers	Systemic

SECTION 8: Exposure controls/personal protection

2-butoxyethyl acetate	DNEL	Short term Inhalation	bw/day 333 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	775 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	102 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	bw/day 133 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	102 mg/kg	Workers	Systemic
	DNEL	Short term Inhalation	bw/day 166 mg/m ³	Consumers	Local
	DNEL	Short term Inhalation	499 mg/m ³	Consumers	Systemic
	DNEL	Short term Dermal	27 mg/kg	Consumers	Systemic
	DNEL	Short term Oral	18 mg/kg	Consumers	Systemic
	DNEL	Long term Inhalation	bw/day 67 mg/m ³	Consumers	Systemic
	DNEL	Long term Dermal	36 mg/kg	Consumers	Systemic
	DNEL	Long term Oral	bw/day 4.3 mg/kg	Consumers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
n-butyl acetate	Fresh water	0.18 mg/l	-
	Marine	0.018 mg/l	-
	Fresh water sediment	0.981 mg/kg	-
	Marine water sediment	0.0981 mg/kg	-
	Soil	0.0903 mg/kg	-
	Sewage Treatment Plant	35.6 mg/l	-
	xylene	Fresh water	0.327 mg/l
Marine water		0.327 mg/l	-
Fresh water sediment		12.46 mg/kg	-
Marine water sediment		12.46 mg/kg	-
Soil		2.31 mg/kg	-
Sewage Treatment Plant		6.58 mg/l	-
ethylbenzene		Fresh water	0.1 mg/l
	Marine water	0.01 mg/l	-
	Fresh water sediment	13.7 mg/kg	-
	Marine water sediment	1.37 mg/kg	-
	Soil	2.68 mg/kg	-
	Sewage Treatment Plant	9.6 mg/l	-
	2-butoxyethyl acetate	Fresh water	0.304 mg/l
Marine		0.0304 mg/l	-
Fresh water sediment		2.03 mg/kg	-
Marine water sediment		0.203 mg/kg	-
Soil		0.68 mg/kg	-
Sewage Treatment Plant		90 mg/l	-

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

- Appropriate engineering controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.
- 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** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: chemical splash goggles and/or face shield.
- 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. > 8 hours (breakthrough time): Recommended EN 374 polyvinyl alcohol (PVA) ≥ 0.7 mm
 < 1 hour (breakthrough time): Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (≥ 0.35 mm). Only suitable as splash protection. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.
 There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
 The breakthrough time must be greater than the end use time of the product.
 The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
 Gloves should be replaced regularly and if there is any sign of damage to the glove material.
 Always ensure that gloves are free from defects and that they are stored and used correctly.
 The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
 Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
- 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. Recommended: Cotton or cotton/synthetic overalls or coveralls are normally suitable.
- 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** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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. Recommended: EN 405:2001 + A1:2009 organic vapour (Type A) and particulate filter FFA2P3 R D
- Environmental exposure controls** : Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****Appearance**

Physical state	: Liquid.
Colour	: Not available.
Odour	: Not available.
Odour threshold	: Not available.
pH	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: >100°C
Flash point	: Closed cup: 27°C
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Not available.
Vapour pressure	: Not available.
Vapour density	: Not available.
Relative density	: 0.979
Solubility(ies)	: Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C): 0.06 cm ² /s
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	: Stable under recommended storage and handling conditions (see Section 7).
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.
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	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

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 Hydroxyphenyl-benzotriazole derivate I, Hydroxyphenyl-benzotriazole derivate II, bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate. May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
	LD50 Dermal	Rabbit	>14112 mg/kg	-
	LD50 Oral	Rat	10760 mg/kg	-
xylene	LC50 Inhalation Vapour	Rat	27.6 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat	>9.6 mg/l	4 hours
	LD50 Dermal	Rabbit	>15000 mg/kg	-
	LD50 Oral	Rat	>3500 mg/kg	-
2-butoxyethyl acetate	LC50 Inhalation Vapour	Rat	>3.91 mg/l	4 hours
	LD50 Dermal	Rabbit	1500 mg/kg	-
	LD50 Oral	Rat	1880 mg/kg	-
Hydroxyphenyl-benzotriazole derivate I	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
Hydroxyphenyl-benzotriazole derivate II	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2300 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Route	ATE value
Dermal	16051.1 mg/kg
Inhalation (vapours)	127.6 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	100 Percent	-
	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
ethylbenzene	Eyes - Severe irritant	Rabbit	-	500	-

SECTION 11: Toxicological information

2-butoxyethyl acetate	Skin - Mild irritant	Rabbit	-	milligrams 24 hours 15	-
	Eyes - Mild irritant	Rabbit	-	milligrams 24 hours 500	-
	Skin - Mild irritant	Rabbit	-	milligrams 500	-

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
n-butyl acetate xylene	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene ethylbenzene	Category 2 Category 2	Not determined Not determined	Not determined hearing organs

Aspiration hazard

Product/ingredient name	Result
xylene ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Other information : Not available.

SECTION 12: Ecological information**12.1 Toxicity**

There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment, but contains substance(s) hazardous to the environment. See section 3 for details.

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
n-butyl acetate	Acute EC50 647.7 mg/l	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 44 mg/l	Daphnia	48 hours
	Acute LC50 32 mg/l	Crustaceans - Artemia salina	48 hours
	Acute LC50 18 mg/l	Fish - Pimephales promelas	96 hours
	Acute NOEC 200 mg/l	Algae	72 hours
	Chronic NOEC 23 mg/l	Daphnia - Daphnia magna	21 days
xylene	Acute EC50 1 to 10 mg/l	Algae	72 hours
	Acute EC50 1 to 10 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 1 to 10 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 >1.8 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 >10 mg/l	Fish - Pimephales promelas	96 hours
2-butoxyethyl acetate	Acute EC50 1570 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 37 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 22 mg/l	Fish - Pimephales promelas	96 hours
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LC50 7.9 mg/l	Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
n-butyl acetate	OECD 301D Ready Biodegradability - Closed Bottle Test	>80 % - 5 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-butyl acetate	-	-	Readily
2-butoxyethyl acetate	-	90.4%; 28 day(s)	-

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
n-butyl acetate	2.3	-	low
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low
2-butoxyethyl acetate	1.51	-	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

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 : The classification of the product may meet the criteria for a hazardous waste.

Disposal considerations : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

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.

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Type of packaging CEPE Paint Guidelines	15 01 10*	European waste catalogue (EWC) packaging containing residues of or contaminated by dangerous substances
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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.

SECTION 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.	No.	No.	No.

SECTION 14: Transport information

<p>Additional information</p>	<p>Hazard identification number 30</p> <p>Limited quantity 5 L</p> <p>Special provisions 163, 640E, 650</p> <p>Tunnel code (D/E)</p>	<p>Special provisions 163, 640E, 650</p>	<p>Emergency schedules (EmS) F-E, _S-E_</p> <p>Special provisions 163, 223, 955</p>	<p>Passenger and Cargo Aircraft Quantity limitation: 60 L Packaging instructions: 355</p> <p>Cargo Aircraft Only Quantity limitation: 220 L Packaging instructions: 366</p> <p>Limited Quantities - Passenger Aircraft Quantity limitation: 10 L Packaging instructions: Y344</p> <p>Special provisions A3, A72</p>
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14.6 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.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 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 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

None of the components are listed.

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

Other EU regulations

Europe inventory : All components are listed or exempted.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P5c: Flammable liquids 2 and 3 not falling under P5a or P5b
C6: Flammable (R10)

SECTION 15: Regulatory information

Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia : All components are listed or exempted.
Canada : All components are listed or exempted.
China : Not determined.
Japan : At least one component is not listed.
Malaysia : Not determined.
New Zealand : All components are listed or exempted.
Philippines : Not determined.
Republic of Korea : All components are listed or exempted.
Taiwan : Not determined.
United States : All components are listed or exempted.

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

SECTION 16: Other information

CEPE code : 1

✔ 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]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226 STOT SE 3, H336	On basis of test data Calculation method

SECTION 16: Other information

Full text of abbreviated H statements	: H225 H226 H304 H312 H312 (dermal) H315 H317 H319 H332 H332 (inhalation) H335 H336 H373 H373 (hearing organs) H400 H410 H411 H412	Highly flammable liquid and vapour. Flammable liquid and vapour. May be fatal if swallowed and enters airways. Harmful in contact with skin. Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May cause damage to organs through prolonged or repeated exposure. (hearing organs) Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.
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Full text of classifications [CLP/GHS]	: Acute Tox. 4, H312 Acute Tox. 4, H332 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Aquatic Chronic 2, H411 Aquatic Chronic 3, H412 Asp. Tox. 1, H304 EUH066 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT RE 2, H373 STOT RE 2, H373 (hearing organs) STOT SE 3, H335 STOT SE 3, H336	ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 ACUTE AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 2 LONG-TERM AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 Repeated exposure may cause skin dryness or cracking. SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
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Full text of abbreviated R phrases	: R11- Highly flammable. R10- Flammable. R20- Harmful by inhalation. R20/21- Harmful by inhalation and in contact with skin. R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation. R65- Harmful: may cause lung damage if swallowed. R38- Irritating to skin. R43- May cause sensitisation by skin contact. R66- Repeated exposure may cause skin dryness or cracking. R67- Vapours may cause drowsiness and dizziness. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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SECTION 16: Other information

Full text of classifications [DSD/DPD] : F - Highly flammable
Xn - Harmful
Xi - Irritant
N - Dangerous for the environment

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Version : 1

Notice to reader

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.