



SAFETY DATA SHEET

Preferre 5750

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

1.1 Product identifier

Product name : Preferre 5750

Product type : Liquid.

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

Use of the substance/mixture : Adhesive, Hardener. Woodworking industry.

1.3 Details of the supplier of the safety data sheet

Supplier : TS Resins Limited (Mold)

Alyn Works,
Denbigh Road,
Mold,
Flintshire
CH7 1BF
United Kingdom
Tel +44 (0)1352 757 657

e-mail address of person responsible for this SDS : gavin.ding@tsresins.co.uk

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : Not available.

Supplier

Telephone number : +44 (0) 1352 750 416

Hours of operation : Monday 06:00 to Saturday 06:00 GMT

SECTION 2: Hazard Identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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
Carc. Cat. 3; R40
Muta. Cat. 3; R68
Xn; R20/21/22
C; R34
Xi; R37
R43

Physical/chemical hazards : Flammable.
No known significant effects or critical hazards.

SECTION 2: Hazard Identification

Human health hazards : Limited evidence of a carcinogenic effect. Possible risk of irreversible effects. Harmful by inhalation, in contact with skin and if swallowed. Causes burns. Irritating to respiratory system. May cause sensitisation by skin contact.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

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 symbol or symbols :



Indication of danger : Corrosive

Risk phrases :

R10- Flammable.

R40- Limited evidence of a carcinogenic effect.

R68- Possible risk of irreversible effects.

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

R34- Causes burns.

R37- Irritating to respiratory system.

R43- May cause sensitisation by skin contact.

Safety phrases :

S23- Do not breathe vapour.

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Supplemental label : Not applicable.

elements

Hazardous ingredients :

Phenol, polymer with formaldehyde
formaldehyde
phenol

Special packaging requirements

Containers to be fitted with : Not applicable.

child-resistant fastenings

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : Not available.

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture
Chemical characterisation : Phenol resorcinol formaldehyde resin.

Product/ingredient	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Phenol, polymer with Formaldehyde	REACH #: Exempted CAS: 9003-35-4	35 - 50	R43	Skin Sens. 1, H317	[1]
ethanol	REACH #: 012119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	5 - 10	F; R11	Flam. Liq. 2, H225 Eye Irrit. 2, H319	[2]
Formaldehyde	REACH #: 01-2119488953-20 EC: 200-001-8 CAS: 50-00-0 Index: 605-001-00-5	5 - 25	67/548/EEC Carc. Cat. 3; R40 T; R23/24/25 C; R34 R43	Regulation (EC) No. 1272/2008 [CLP] Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335i	[1] [2]
phenol	REACH #: 01-2119471329-32 EC: 203-632-7 CAS: 108-95-2 Index: 604-001-00-2	3 - 10	Muta. Cat. 3; T; R23/24/25 Xn; R48/20/21/22 C; R34	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Muta. 2, H341	[1] [2]
Methanol	REACH #: 01-2119433307-44 EC: 200-659-6 CAS: 67-56-1 Index: 603-001-00-	<3	F; R11 T; R23/24/25 R39/23/24/25	Flam Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370	[1] [2]
			See section 16 for the full text of the Rphrases declared above	See section 16 for the full text of the Rphrases declared above	

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Move exposed person to fresh air. If breathing is difficult, give oxygen.
- Skin contact** : Get medical attention immediately. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure.
- Ingestion** : Get medical attention immediately. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting. Chemical burns must be treated promptly by a physician.
- General** : Move the victim to a safe area as soon as possible. If unconscious, place in recovery position and seek medical advice. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Allow the victim to rest in a well-ventilated area.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact** : Corrosive to eyes. Causes burns.
- Inhalation** : Harmful by inhalation. Irritating to respiratory system.
- Skin contact** : Corrosive to the skin. Causes burns. Harmful in contact with skin. May cause sensitisation by skin contact.
- Ingestion** : Harmful if swallowed. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
tearing eye
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

SECTION 5: Firefighting measures

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.

5.1 Extinguishing media

Suitable extinguishing : Use dry chemical, CO₂, 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. In a fire or if heated, a pressure increase will occur and the substance or mixture container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

5.3 Advice for firefighters

Special precautions for : 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. 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 Section 8 for additional information on hygiene measures.

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).

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with liquid-binding material (sand, diatomite, universal binders etc.) or use a spill kit. Use spark-proof tools and explosion-proof equipment.

SECTION 6: Accidental release measures

- Large spill :** Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Absorb with dry earth, sand or other non-combustible material. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- 6.4 Reference to other section :** 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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 Keep container tightly closed and sealed until ready for use. Use appropriate storage, including any containment to avoid environmental contamination. Store away from incompatible incompatibilities materials (see Section 10). Keep away from food, drink and animal feeding stuffs.

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
ethanol	AOSH (Ireland, 8/2007). OELV-8hr: 1000 ppm 8 hour(s). OELV-8hr: 1900 mg/m ³ 8 hour(s).
Formaldehyde	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 2,5 mg/m ³ 15 minute(s). STEL: 2 ppm 15 minute(s). TWA: 2 ppm 8 hour(s). TWA: 2,5 mg/m ³ 8 hour(s).
phenol	EH40/2005 WELs (United Kingdom (UK), 8/2007). Absorbed through skin. TWA: 2 ppm 8 hour(s)
Methanol	EH40/2005 WELs (United Kingdom (UK), 8/2007). Absorbed through skin. STEL: 333 mg/m ³ 15 minute(s). STEL: 250 ppm 15 minute(s). TWA: 266 mg/m ³ 8 hour(s). TWA: 200 ppm 8 hour(s).

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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Product/ingredient name	Type	Exposure	Value	Population	Effects
ethanol	DNEL	Short term Inhalation	1900mg/m ³	Workers	Local
	DNEL	Long term Inhalation	950 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	343 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	950 mg/m ³	Consumers	Local
	DNEL	Long term Inhalation	114 mg/m ³	Consumers	Systemic
	DNEL	Long term Dermal	206 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	87 mg/kg bw/day	Consumers	Systemic
formaldehyde	DNEL	Short term Inhalation	0,8 ppm	Workers	Local
	DNEL	Long term Dermal	240 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	9 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0,037 mg/cm ²	Workers	Local
	DNEL	Long term Inhalation	0,4 ppm	Workers	Local

SECTION 8: Exposure controls/personal protection					
Product/ingredient name	Type	Exposure	Value	Population	Effects
formaldehyde	DNEL	Long term Dermal	102 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	3,2 mg/cm ²	Consumers	Systemic
	DNEL	Long term Oral	4,1 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Dermal	0,012 mg/cm ²	Consumers	Local
	DNEL	Long term Inhalation	0,1 mg/m ³	Consumers	Local
Phenol	DNEL	Short term Inhalation	16 mg/m ³	Workers	Local
	DNEL	Long term Dermal	1.23 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	8 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0.4 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	1.32 mg/m ³	Consumers	Systemic
	DNEL	Long term Oral	0.4 mg/kg bw/day	Consumers	Systemic
Methanol	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	Workers	Local
	DNEL	Long term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	260 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	260 mg/m ³	Workers	Local
	DNEL	Short term Dermal	8 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Inhalation	50 mg/m ³	Consumers	Systemic
	DNEL	Short term Oral	8 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Inhalation	50 mg/m ³	Consumers	Local
	DNEL	Long term Dermal	8 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	50 mg/m ³	Consumers	Systemic
	DNEL	,Long term Oral	8 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	50 mg/m ³	Consumers	Local

SECTION 8: Exposure controls/personal protection

Predicted effect concentrations

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
ethanol	PNEC	Fresh water	0,96 mg/l	-
	PNEC	Marine	0,79 mg/l	-
	PNEC	Sewage Treatment	580 mg/l	-
	PNEC	Fresh water sediment	3,6 mg/kg dwt	-
	PNEC	Marine water sediment	2,9 mg/kg dwt	-
	PNEC	Soil	0,63 mg/kg dwt	-
formaldehyde	PNEC	Fresh water	0,47 mg/l	Assessment Factors
	PNEC	Marine	0,47 mg/l	Assessment Factors
	PNEC	Fresh water	4,7 mg/l	Assessment Factors
	PNEC	Fresh water sediment	2,44 mg/kg dwt	Equilibrium Partitioning
	PNEC	Marine water sediment	2,44 mg/kg dwt	Equilibrium Partitioning
	PNEC	Soil	0,21 mg/kg dwt	Equilibrium Partitioning
	PNEC	Sewage Treatment Plant	0,19 mg/l	Assessment Factors
Phenol	PNEC	Fresh water	0.0077 mg/l	Assessment Factors
	PNEC	Marine	0.00077 mg/l	Assessment Factors
	PNEC	Intermittent release.	0.031 mg/l	Assessment Factors
	PNEC	Fresh water sediment	0.0915 mg/kg dwt	Equilibrium Partitioning
	PNEC	Marine water sediment	0.00915 mg/kg Dwt	-
	PNEC PNEC	Soil Assessment Sewage Treatment Plant	0.136 mg/kg dwt 2.1 mg/l	Factors Assessment Factors
Methanol	PNEC	Fresh water	154 mg/l	Assessment Factors
	PNEC	Marine	15,4 mg/l	Assessment Factors
	PNEC	Intermittent release.	1540 mg/l	Assessment Factors
	PNEC	sediment	570,4 mg/kg dwt	Equilibrium Partitioning
	PNEC	Soil	23,5 mg/kg wwt	Equilibrium Partitioning
	PNEC	Sewage Treatment	100 mg/l	Assessment Factors

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection :

Use safety eyewear designed to protect against splash of liquids.
Recommended : Tightly-fitting goggles

Hand protection :

Wear chemical-resistant gloves (tested to EN374). Observe supplier's instructions concerning penetrability and breakthrough time.
Recommended : PVC, butyl rubber or neoprene rubber

SECTION 8: Exposure controls/personal protection

Other skin protection : Wear suitable protective clothing. 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.

Recommended : Wear work clothing with long sleeves.
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 : Wear appropriate respirator when ventilation is inadequate. 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 : Type AX (Brown): Low boiling organic compounds.

Environmental exposure : Emissions from ventilation or work process equipment should be checked to ensure controls they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state :	Liquid. [Paste.]
Colour :	Brown. [Dark]
Odour :	Formaldehyde. [Strong]]
Odour threshold :	Not available.
pH :	7 to 8
Melting point/freezing point :	Not available.
Initial boiling point and boiling range	Not available.
Flash point :	Closed cup: 37°C [Pensky-Martens.]
Evaporation rate :	Not available.
Flammability (solid, gas) :	Not available.
Burning time :	Not applicable.
Burning rate :	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure :	Not applicable.
Vapour density :	Not available.
Relative density :	Not available.
Density (liquid) :	1,23 g/cm ³ [25°C]
Solubility :	Not soluble in water
Partition coefficient: n: octanol/water	Not available.
Auto-ignition temperature :	Not available.
Decomposition temperature :	Not available.
Viscosity : Dynamic:	13000 to 25000 mPa·s [25 °C]
Explosive properties :	Not available.
Oxidising properties :	Not available.

9.2 Other information

VOC content : 25.5% (w/w)

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 :	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
10.5 Incompatible materials :	Reactive or incompatible with the following materials: oxidizing materials
10.6 Hazardous : decomposition products	Under normal conditions of storage and use, hazardous should not be produced. Formaldehyde and phenol may be released during processing.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LC50 Inhalation Vapour	Rat - Male, Female	124,7 mg/l	4 hours
	LD50 Oral	Rat - Male, Female	10470 mg/kg	-
formaldehyde	LC50 Inhalation Gas.	Rat - Male	490 ppm	4 hours
	LD50 Oral	Rat - Male	460 mg/kg	-
phenol	LC0 Inhalation Vapour	Rat - Female	900 mg/m ³	8 hours
	LD50 Dermal	Rat - Female	660 mg/kg	-
	LD50 Oral	Human	140 to 290 mg/kg	-
	LD50 Oral	Rat - Male, Female	340 mg/kg	-
Methanol	LC50 Inhalation Vapour	Rat - Male, Female	128,2 mg/l	4 hours
	LD50 Dermal	Rabbit	17100mg/kg	-
	LD50 Oral	Rat - Male, Female	1187 to 2769 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation	
ethanol	Skin - Primary dermal irritation index (PDII)	Rabbit	0	60 hours 0.2ml	24 hours	
	Skin - Erythema/Eschar	Rabbit	0	60 hours 0.2ml	24 hours	
	Skin - Oedema	Rabbit	0	60 hours 0.2ml	24 hours	
	Eyes - Cornea opacity	Rabbit	1,1	1 minutes 0.1ml	21 days	
	Eyes - Iris lesion	Rabbit	0,44	1 minutes	21 days	
	Eyes - Redness of the conjunctivae	Rabbit	2,1	0.1ml 1 minutes 0.1ml	21 days	
	Eyes - Oedema of the conjunctivae	Rabbit	1,3	1 minutes 0.1ml	21 days	

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
formaldehyde	Skin - Irritant	Rat	-	-	7 days
	Eyes - Irritant	Rabbit	-	-	-
	Skin - Oedema	Rabbit	3	-	24 hours
	Eyes - Cornea opacity	Rat	4	-	7 days
phenol	Skin - Visible necrosis	Rat	-	1 minutes	7 to 10 days
	Skin - Erythema/Eschar	Rabbit	4	1ml/kg 24 hours 0.5g	72 hours
	Eyes - Irritant	Rabbit	-	100mg	14 days
Methanol	Skin - Oedema	Rabbit	0	-	72 hours
	Eyes - Cornea opacity	Rabbit	1	24hours	-

Conclusion/Summary : Not available.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
formaldehyde	skin	Mouse	Sensitising
	skin	Guinea pig	Sensitising
Phenol	skin	Mouse	Not Sensitising
	skin	Guinea pig	Not Sensitising
Methanol	Respiratory	Guinea pig	Not Sensitising
	Skin	Guinea pig	Not Sensitising

Conclusion/Summary : Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
formaldehyde	OECD 471	Experiment: In vitro Subject: Bacteria	Positive
	OECD 741	Experiment: In vitro Subject: Mammalian-Animal	Positive
	OECD 484	Experiment: In vivo Subject: Mammalian-Animal	Negative
ethanol	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Metabolic activation: + & -	Negative
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal Metabolic activation: + &	Negative
	OECD 478 Genetic Toxicology: Rodent Dominant Lethal Test	Experiment: In vivo Subject: Mammalian-Animal Metabolic activation: + & -	Equivocal
phenol	OECD 487 In vitro Micronucleus Test	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic Metabolic activation: Yes	Positive
	OECD 473 In vitro Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic Metabolic activation: Yes	Positive

SECTION 11: Toxicological information			
Product/ingredient name	Test	Experiment	Result
Methanol	DNA damage and repair OECD 471	Experiment: In vitro Subject: Bacteria	Positive
		Experiment: In vitro Subject: Bacteria	Negative
	OECD 476	Experiment: In vivo Subject: Mammalian-Animal	Negative
	OECD 474	Experiment: In vivo Subject: Mammalian-Animal	Negative

Carcinogenicity

Conclusion/Summary :

Formaldehyde: Formaldehyde has local carcinogenic activity in experimental animals; there is evidence for a threshold effect for tumors involving cytotoxicity and regenerative cell proliferation as the mode of action. There is no evidence for systemic or local carcinogenic effects after oral exposure in rats. In dermal initiation/promotion studies formaldehyde did not initiate or promote skin tumorigenesis in mice. There is a clear evidence from chronic inhalation studies in rats that formaldehyde causes tumors in the nasal cavity.

Phenol: Phenol is not considered to be carcinogen in experimental animals after repeated oral exposure. There is evidence for promoting activity of phenol after repeated dermal application at concentrations inducing severe local effects due to the corrosive properties. There is no evidence for carcinogenicity in epidemiology.

Methanol: Methanol was investigated for chronic toxicity and carcinogenicity in two long-term body inhalation studies. There was no evidence of a carcinogenic potential in rats and mice exposed to air concentrations up to 1.3 mg/L.

In studies with oral administration in rats and mice the number of tumor-bearing animals in the rat study showed a clear dose-related trend. The effective dose levels were far above human occupational exposure levels and are already associated with other forms of toxicity in humans.

Reproductive toxicity

Conclusion/Summary :

Formaldehyde: It is not expected that formaldehyde reaches the reproductive organs and there is no evidence for effects on fertility and gonads in experimental animals after long-term oral or inhalation exposure. Toxicokinetic data suggest only local effects at the site of entry.

Phenol: In a long-term drinking water study in rats and mice mammary gland, no effects on reproductive organs were detected.

Methanol: Conclusive, but not sufficient for classification.

Teratogenicity

Conclusion/Summary :

Formaldehyde: There is no evidence for adverse effects of formaldehyde on embryo and fetal development as dose levels inducing local maternal effects and secondary decrease in body weights and growth.

Phenol: Oral exposure to phenol resulted in growth retardation of the offspring and impaired postnatal viability and growth. However, these effects were found in dose levels that were also toxic to the dams. Therefore, phenol is not considered to have specific embryo- or fetotoxic effects.

Methanol: Conclusive, but not sufficient for classification.

Information on the likely routes of exposure

Not available.

SECTION 11: Toxicological information

Potential acute health effects

Inhalation :	Harmful by inhalation. Irritating to respiratory system.
Ingestion :	Harmful if swallowed. May cause burns to mouth, throat and stomach.
Skin contact :	Corrosive to the skin. Causes burns. Harmful in contact with skin. May cause sensitisation by skin contact.
Eye contact :	Corrosive to eyes. Causes burns.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation :	Adverse symptoms may include the following: respiratory tract irritation coughing tearing eye
Ingestion :	Adverse symptoms may include the following: stomach pains
Skin contact :	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Eye contact :	Adverse symptoms may include the following: 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.

SECTION 11: Toxicological information

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	Sub-chronic NOAEL Oral	Rat - Male, Female	1,28 mg/kg	14 weeks; 7 days per week
	Sub-chronic LOAEL Oral	Rat - Male, Female	3,16 mg/kg	14 weeks; 7 days per week
formaldehyde	Chronic LOAEL Oral	Rat - Male, Female	82 mg/kg	105 weeks
	Chronic NOAEC Inhalation Gas.	Rat - Male, Female	1 ppm	26 weeks
	Sub-acute NOAEC Inhalation Gas.	Rat - Male	2 ppm	6 weeks
	Sub-acute LOAEC Inhalation Gas.	Rat - Male	6 ppm	6 weeks
Phenol	Sub-chronic NOAEL Oral	Rat - Male Rabbit	300 mg/kg	13 weeks
	Sub-acute NOAEL Dermal	Rat - Male, Female	130 mg/kg	18 days; 5 hours per day

SECTION 11: Toxicological information				
Product/ingredient name	Result	Species	Dose	Exposure
Methanol	Chronic NOAEL Oral	Rat - Male, Female	466 to 529 mg/kg Repeated dose	104 weeks
	Chronic NOEC Inhalation Vapour	Rat - Male, Female	0,13 mg/l	12 months
	Chronic NOAEC Inhalation Vapour	Rat - Male Female	1,3 mg/l Continuous	108 days
	Chronic NOAEC Inhalation Vapour	Rat	1,33 mg/l Continuous	17 days; 22,7 hours per day

Conclusion/Summary : Not available.

General : 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. Solvents may cause some of the above effects by absorption through the skin. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : May cause cancer, based on animal data. Limited evidence of a carcinogenic effect. Risk of cancer depends on duration and level of exposure.
Formaldehyde is classified as a category 3 carcinogen by the EU. This classification is based on carcinogenic effects demonstrated in animal experiments.

NOTE: In 2004 the International Agency for Research on Cancer (IARC) decided to classify formaldehyde as a group 1 "Human carcinogen", not only on the basis of animal experiments, but also on the basis of epidemiology demonstrating evidence of carcinogenicity in humans. The actual risk is a rare type of cancer of the nasopharyngeal area (the upper part of the throat - behind the nose).

Mutagenicity : May cause heritable genetic effects, based on animal data.

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.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
ethanol	EC50 675 mg/l Fresh water	Algae - <i>Chlorella vulgaris</i>	4 days Static
	EC50 4432 mg/l Fresh water	Aquatic plants - <i>Lemna gibba</i>	7 days Static
	Acute LC50 5012 mg/l Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	48 hours Static
	Acute LC50 14200 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours Flow Through
	Acute LC50 15300 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours Flow through
	Chronic LC50 1806 mg/l Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	10 days Semi-static
	Chronic LC50 454 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	9 days Semi-static
formaldehyde	Chronic NOEC 9,6 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	9 days Semi-static
	EC50 4,89 mg/l Fresh water	Algae - <i>Scenedesmus subspicatus</i>	72 hours
	Acute EC50 5,8 mg/l Fresh water Acute LC50 6,7 mg/l Fresh water	Daphnia - <i>Daphnia pulex</i> Fish - <i>Morone saxatilis</i>	48 hours 96 hours
Phenol	Acute EC50 76 mg/l Static Marine water	Algae - <i>Entomoneis cf punctulata</i>	72 hours Static
	Acute EC50 61.1 mg/l Static Fresh water	Algae - <i>Pseudokirchnerella subcapitata</i> - 4 to 7 days	96 hours Static
	Acute EC50 3.1 mg/l Static Fresh water	Daphnia - <i>Ceriodaphnia dubia</i>	48 hours Static
	Acute IC50 21 mg/l Static Fresh water	Neonate - <12 hours Micro-organism - <i>Nitrosomonas sp.</i>	24 hours Static
	Acute LC50 8.9 mg/l Flow through Fresh water	Fish - <i>Oncorhynchus Mykiss</i> - 7.8 cm - 6.1 g	96 hours Flow through
	Chronic NOEC 0.16 mg/l Semi-static Fresh water	Daphnia - <i>Daphnia magna</i>	16 days Semi-static
	Chronic NOEC 0.077 mg/l Semi-static Fresh water	Fish - <i>Cirrhina mrigala</i> - 4 days 4.5 mm - 51 mg	60 days Semi-static
Methanol	EC50 22000 mg/l Fresh water	Algae - <i>Selenastrum Capricornutum</i>	96 hours Static
	IC50 8800 mg/l Fresh water	Micro-organism - <i>Nitrosomonas sp.</i>	24 hours Static
	Acute EC50 >10000 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours Static
	Acute LC50 15400 mg/l Fresh water	Fish - <i>Lepomis macrochirus</i>	96 hours Flow Through
	Chronic NOEC 7900 mg/l Fresh water	Fish - <i>Oryzias latipes</i>	200 hours Static

SECTION 12: Ecological information

Conclusion/Summary : **Formaldehyde:** Toxic to aquatic organisms.
Phenol: Toxic to aquatic organisms.
Methanol: No known significant effects or critical hazards.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
formaldehyde	Anaerobic biodegradation OECD 303 A	100 % - 4 days 99,5 % - 160 days	Degradation Degradation	Anaerobic sludge Activated sludge Industrial Adapted
	OECD 301 C OECD 301 D	97 % - Readily - 14 days 90 % - Readily - 28 days	TOC removal 30 mg/l O2 Consumption	- -
Phenol	-	86 to 96 % - 20 days	3 to 10 mg/l	Fresh water Marine water
	-	80.1 % - 50 days	20 to 50 mg/l	Activated sludge
	OECD 301C	62 % - Readily - 4.16 days	100 mg/l	Activated sludge
Methanol	-	83 to 91 % - Readily - 3 days	-	Fresh water Sediment
	-	71 to 83 % - Readily - 5 days	BOD/ThOD	Sewage
	-	69 to 97 % - 5 days	O2 Consumption	Marine water
	-	53,4 % - 5 days	-	-
	-	46,3 % - 5 days	-	-

Conclusion/Summary : **Formaldehyde:** Readily biodegradable
Phenol : Readily biodegradable
Methanol: Readily biodegradable

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
formaldehyde	-	-	Readily
Phenol	Estuarine water 7 days	-	Readily
	Estuarine water 73 days		
	Estuarine water 15 days		
Methanol	-	50%; 17.2 day(s)	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
formaldehyde	0,35	0,396	Low
Phenol	1.47	17.5	Low
Methanol	-0.77	<10	Low

12.4 Mobility in soil

Soil/water partition coefficient (KOC) : 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. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 13: Disposal considerations

Packaging





Methods of disposal : Waste packaging should be recycled.

Type of packaging	European waste catalogue (EWC)
Can	15 01 02 plastic packaging 15 01 10* packaging containing residues of or contaminated by dangerous substances
Plastic or non-metallic drum	15 01 02 plastic packaging 15 01 10* packaging containing residues of or contaminated by dangerous substances
Pail	15 01 04 metallic packaging
Intermediate Bulk Container (IBC)	15 01 10* packaging containing residues of or contaminated by dangerous substances 15 01 02 plastic packaging 15 01 04 metallic packaging 15 01 10* packaging containing residues of or contaminated by dangerous substances
Pallet	15 01 03 wooden 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	UN1866	UN1866	UN1866	UN1866
14.2 UN proper shipping name	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION

SECTION 14: Transport information				
	ADR/RID	ADN/ADNR	IMDG	IATA
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
14.6 Special precautions for user	Not available.	Not available.	Not available.	Not available.
Additional information	Hazard identification Number 30 Limited quantity LQ7 Special provisions 640E Tunnel code (D/E)	-	Emergency schedules (EmS) F-E, _S-E_	Passenger and Cargo Aircraft Quantity limitation: 60 L Packaging instructions: 309 Cargo Aircraft Only Quantity limitation: 220 L Packaging instructions: 310 Limited Quantities Passenger Aircraft Quantity limitation: 10 L Packaging instructions: Y309

14.7 Transport in bulk :
according to Annex II of
MARPOL 73/78 and the IBC
Code

Not available.

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

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 :
Black List Chemicals :
Priority List Chemicals :
Integrated pollution :
prevention and control list

Not determined.
Not listed
Listed
Not listed

SECTION 15: Regulatory information

(IPPC) - Air

Integrated pollution : Not listed
prevention and control list

(IPPC) – Water

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
formaldehyde	Carc. Cat. 3; R40	-	-	-
Phenol	-	Muta. Cat. 3; R68	-	-

National regulations

15.2 Chemical Safety : Assessments : This product contains substances for which Chemical Safety Assessments are still required.

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

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

Flam. Liq. 3, H226
Acute Tox. 4, H302
Acute Tox. 4, H332
Skin Corr. 1B, H314
Eye Dam. 1, H318
Skin Sens. 1, H317
Muta. 2, H341
Carc. 2, H351
STOT SE 3, H335i

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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H302	Calculation method
Acute Tox. 4, H332	Calculation method
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Muta. 2, H341	Calculation method
Carc. 2, H351	Calculation method
STOT SE 3, H335i	Calculation method

Full text of abbreviated H: Statements

H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H335i May cause respiratory irritation.

SECTION 16: Other information

**Full text of abbreviated H:
Statements**

H341 Suspected of causing genetic defects.
H351 Suspected of causing cancer.
H370 Causes damage to organs.
H373 May cause damage to organs through prolonged or repeated exposure.

**Full text of classifications
[CLP/GHS]**

Acute Tox. 3, H301 ACUTE TOXICITY: ORAL - Category 3
Acute Tox. 3, H311 ACUTE TOXICITY: SKIN - Category 3
Acute Tox. 3, H331 ACUTE TOXICITY: INHALATION - Category 3
Acute Tox. 4, H302 ACUTE TOXICITY: ORAL - Category 4
Acute Tox. 4, H332 ACUTE TOXICITY: INHALATION - Category 4
Carc. 2, H351 CARCINOGENICITY - Category 2
Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
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
Muta. 2, H341 GERM CELL MUTAGENICITY - Category 2
Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B
Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1
STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) [kidneys, liver, nervous system and skin] -Category 2
STOT SE 1, H370 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [central nervous system (CNS) and optic nerve] - Category 1
STOT SE 3, H335i SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [Respiratory tract irritation] -Category 3

**Full text of abbreviated R
Phrases**

R11- Highly flammable.
R10- Flammable.
R40- Limited evidence of a carcinogenic effect.
R68- Possible risk of irreversible effects.
R23/24/25- Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25- Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R48/20/21/22- Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R34- Causes burns.
R37- Irritating to respiratory system.
R43- May cause sensitisation by skin contact.

SECTION 16: Other information

Full text of classifications

[DSD/DPD]

F - Highly flammable
Carc. Cat. 3 - Carcinogen category 3
Muta. Cat. 3 - Mutagen category 3
T - Toxic
C - Corrosive
Xn - Harmful
Xi - Irritant

Date of issue/ Date of revision : 01.11.2012
Date of previous issue : 16.04.2010
Previous product name : Not available
Version : 4

Notice to reader

To the best of our knowledge, the information contained herein is accurate. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.