SAFETY DATA SHEET

Prefere 4980

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product name : Prefere 4980

Use of the substance/preparation : Adhesive for Woodworking Industry.

Supplier : Dynea Nanjing Co. Ltd
59 Chongfu Road, Chemical Industiral Park, Nanjing China, 210047
Tel: +86 58676888
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2. HAZARDS IDENTIFICATION

Classification : Carc. Cat. 3; R40 Muta. Cat. 3; R68 T;R23/24/25 Xn;R48/20/21/22 R43

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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation : Preparation
Chemical characteristic : Phenol-Formaldehyde Polymer (Water based).

Ingredient name	CAS number	%
Formaldehyde …%	50-00-0	<0.5
Phenol	108-95-2	<3.0
See section 16 for the full text of the R-phrases declared above.		

There are no ingredients or 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 and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit
Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

Inhalation : Move exposed person to fresh air. If breathing is difficult, give oxygen. Get medical attention if adverse health effects persist or are severe. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Get medical attention if adverse health effects persist or are severe.

Skin contact : Wash contaminated skin with soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Get medical attention. In the event of any complaints or symptoms, avoid further exposure.

Eye contact : 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 15 minutes. Get medical attention if irritation occurs.

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 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 or wear gloves.

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

5. FIRE FIGHTING MEASURES

Suitable : Use CO_2, water spray (fog) dry chemical, or foam.
Use an extinguishing agent suitable for the surrounding fire.

Special exposure hazards : In a fire or if heated, a pressure increase will occur and the container may burst.
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.

Hazardous combustion products : Decomposition products may include the following materials
- Carbon oxides
- Nitrogen oxides

Special protective equipment : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive preventive mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Put on appropriate personal protective equipment (see Section 8).

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. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for contact information and section 13 for waste disposal.

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.

7. HANDLING AND STORAGE

Handling : Persons with a history of skin sensitisation 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 breathe 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.

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

Recommended packaging material: Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name	Occupational exposure limits
Formaldehyde …%	EH40-WEL (United Kingdom (UK), 9/2006). WEL 15 min limit: 2.5 mg/m^3 15 minute(s). WEL 15 min limit: 2 ppm 15 minute(s). WEL 8 hrs limit: 2.5 mg/m^3 8 hour(s). WEL 8 hrs limit: 2 ppm 8 hour(s).
Phenol	EH40-WEL (United Kingdom (UK), 9/2006). WEL 8 hrs limit: 8 mg/m3 8 hour(s). WEL 8 hrs limit: 2 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 EN689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure controls	:	Provide 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.
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.
Hand protection	:	Use chemical resistant, impervious gloves.
Eye protection	:	Use safety eyewear designed to protect against splash of liquids.
Skin protection	:	Avoid contact with skin. Wear suitable protective clothing.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
Other exposure controls	:	Avoid contact with food, drinks and feed. Remove and isolate contaminated clothing. Chemical suits exposed to this chemical should be kept isolated. Practice hygiene to prevent contact with eyes and skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	:	Liquid.
Colour	:	Reddish-brown.
Odour	:	Phenol and Formaldehyde.

Important health, safety and environmental information

pH	:	9.6 – 10.5
Viscosity	:	Dynamic; 65 – 95 mPa.s [25°C]
Density	:	About 1.22 g/cm^3 [25°C]
Solubility	:	Partially soluble in water. Soluble in alcohols and acetone.
Flash point	:	>100°C [closed cup]
Auto-ignition point	:	Non-spontaneous
Decomposition Temperature	:	About 300°C

10. STABILITY AND REACTIVITY

Stability	:	The product is stable under normal conditions of storage and use. Exposure to elevated temperatures or strong acids can cause rapid but non-explosive polymerisation, (cross-linking reaction may occur) producing heat.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Formaldehyde and phenol may be released during processing.

11. TOXICOLOGICAL INFORMATION

Potential acute health effects

Inhalation : Vapour may be irritating to eyes and respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion : Harmful if swallowed. Irritating to mouth, throat and stomach.

Skin contact : May cause sensitisation by skin contact.

Acute toxicity

Product/Ingredient name	Test	Species	Dose	Exposure
Formaldehyde …%	LD50 Oral	Rat	800 mg/kg	-
Phenol	LD50 Oral	Rat	317mg/kg	
	LD50 Skin	Rabbit	630mg/kg	
Resin	LD50 Oral	Rat	>5000mg/kg	-

Potential chronic health effects

Chronic effect : 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.

Over-exposure signs/symptoms

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

Skin : Adverse symptoms may include the following
- irritation
- redness

Eyes : Adverse symptoms may include the following:
- irritation
- watering
- redness

12. ECOLOGICAL INFORMATION

Environmental effects **:** The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Aquatic ecotoxicity

Product/Ingredient name	Test	Species	Result	Exposure
Formaldehyde …%	Intoxication	Daphnia	Acute EC50 29 mg/l	24 hours
	Mortality	Fish	Acute LC50 11.6 mg/l	48 hours

Conclusion/Summary : **Formaldehyde**: Toxic to aquatic organisms

Biodegradability

Product/Ingredient name	Aquatic half-life	Photolysis	Biodegradability
Formaldehyde …%	-	-	Readily

Conclusion/Summary : formaldehyde: readily biodegradable

Bioaccumulation potential

Product/Ingredient name	$LogP_{OW}$	BCF	Potential
Formaldehyde …%	0.35	-	Low

13. DISPOSAL CONSIDERATIONS

Methods of disposal **:** 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.

Hazardous waste **:** Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU directive 91/689/EEC.
Cured resin is regarded as non-hazardous waste.

14. TRANSPORT INFORMATION

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated	-	-	-		-
ADNR Class	Not regulated	-	-	-		-
IMDG Class	Not regulated	-	-	-		-
IATA Class	Not regulated	-	-	-		-

PG* : Packing group

15. REGULATORY INFORMATION

Classification and labelling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol **:**

Harmful

Risk phrases **:** R23/24/25 – Toxic by inhalation, in contact with skin and if swallowed.
R34 – Causes burns.
R40 – Possible risks of irreversible effects.
R43 – May cause sensitisation by skin contact.

Safety phrases **:** S24 – Avoid contact with skin.
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)

Contains **:** Phenol 203-632-7
Formaldehyde …% 200-001-8

Product use **:** Adhesive for woodworking industry.

Europe inventory **:** All components are listed or exempted.

16. OTHER INFORMATION

Full text of R-phrases referred to in sections 2 and 3	**:**	R34 – Causes burns. R36/38 – Irritating to eyes and skin. R43 – May cause sensitisation by skin contact. R40 – Limited evidence of carcinogenic effect. R68 – Possible risk of irreversible effects. R23/R24/R25 – Toxic by inhalation, in contact with skin and if swallowed. R48/20/21/22 – Harmful: danger of serious damage to health by prolonged exposure
Full text of classifications referred to in sections 2 and 3	**:**	Carc. Cat. 3 – Carcinogen Category 3 Muta. Cat. 3 – Mutagen Category 3 T – Toxic C – Corrosive Xn – Harmful
Recommended use and restrictions	**:**	Employment restrictions concerning juveniles must be observed. Employment restrictions concerning pregnant and lactating women must be observed.

History

Revision	**:**	3
Date of previous issue	**:**	2014-09-25

Notice to reader:

The information contained herein is correct to the best of our knowledge. However, Dynea Singapore Pte Ltd. makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. We suggest that you evaluate the product as well as the information, formulae and recommendations to determine fitness for the purpose for which its use is proposed. No protection from any law or patent is to be inferred.

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.