SAFETY DATA SHEET

Neutrawood

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance or preparation

Product name : Neutrawood

Product type : Liquid.

Product description : Not available.

Use of the substance/preparation : Car Airfreshener

Company/undertaking identification

Manufacturer : M S George Limited
Merevale House
Parkshot
Richmond
Surrey
TW9 2RG
UK

e-mail address of person responsible for this SDS : sales@msg.co.uk

Emergency telephone number (with hours of operation) : +44 (0)20 8332 1515 (during working hours 09.00 to 17.30 hours)

2. HAZARDS IDENTIFICATION

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

Classification : Xi; R38
R43
R52/53

Human health hazards : Irritating to skin. May cause sensitisation by skin contact.

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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation : Preparation

Ingredient name	CAS number	%	Number	Classification	
Linalool	78-70-6	5 - 15	201-134-4	Xi; R38	[1]
Phenylethyl alcohol	60-12-8	1 - 5	200-456-2	Xi; R36	[1]
propanedioic acid, diethyl ester	105-53-3	1 - 5	203-305-9	Xi; R36	[1]
terpineol	8000-41-7	1 - 5	232-268-1	Xi; R38	[1]
octanal, 2-(phenylmethylene)-	101-86-0	1 - 5	202-983-3	R43	[1]
Allyl amyl glycolate	67634-00-8	1 - 5	266-803-5	Xn; R22 Xi; R38	[1]
2-(4-tert-Butylbenzyl)propionaldehyde	80-54-6	0 - 1	201-289-8	Xn; R22 R43 N; R51/53	[1]
Citronellal	106-23-0	0 - 1	203-376-6	Xi; R38 R43 N; R51/53	[1]
turpentine, oil Any of the volatile predominately terpenic fractions or distillates resulting from the solvent extraction of, gum collection from, or pulping of softwoods. Composed primarily of the C10H16 terpene hydrocarbons: α-pinene, β-pinene, limonene, 3-carene, camphene. May contain other acyclic, monocyclic, or bicyclic terpenes, oxygenated	8006-64-2	0 - 1	232-350-7	R10 Xn; R20/21/22, R65 Xi; R36/38 R43 N; R51/53	[1] [2]

3. COMPOSITION/INFORMATION ON INGREDIENTS

terpenes, and anethole. Exact composition varies with refening methods and the age, location, and species of the softwood source.					
dl-Citronellol	106-22-9	0 - 1	203-375-0	Xi; R38 R43 N; R51/53	[1]
benzoic acid, 2-hydroxy-, pentyl ester	2050-08-0	0 - 1	218-080-2	N; R51/53	[1]
phenyl ether	101-84-8	0 - 1	202-981-2	N; R51/53	[1] [2]
(R)-p-mentha-1,8-diene	5989-27-5	0 - 1	227-813-5	R10 Xi; R38 R43 N; R50/53	[1]
terpinolene	586-62-9	0 - 1	209-578-0	Xn; R65 N; R51/53	[1]
pinene	80-56-8	0 - 1	201-291-9	R10 Xn; R65 R43 N; R50/53	[1]
a-Cedrene	469-61-4	0 - 1	207-418-4	Xn; R65 N; R50/53	[1]
See section 16 for the full text of the R-phrases 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 and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

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

4. FIRST AID MEASURES

First-aid measures

Inhalation : Move exposed person 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of 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. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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 10 minutes. Get medical attention if irritation occurs.

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.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

4. FIRST AID MEASURES

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

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

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. This material is harmful to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

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

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : 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 (see section 8).

Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material.

Methods for cleaning up

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

Large spill : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. 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.

7. HANDLING AND STORAGE

Handling : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. 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. 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.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

Recommended : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name	Occupational exposure limits
turpentine, oil Any of the volatile predominately terpenic fractions or distillates resulting from the solvent extraction of, gum collection from, or pulping of softwoods. Composed primarily of the C10H16 terpene hydrocarbons: α-pinene, β-pinene, limonene, 3-carene, camphene. May contain other acyclic, monocyclic, or bicyclic terpenes, oxygenated terpenes, and anethole. Exact composition varies with refening methods and the age, location, and species of the softwood source.	**EH40/2005 WELs (United Kingdom (UK), 8/2007).** STEL: 850 mg/m³ 15 minute(s). TWA: 100 ppm 8 hour(s). TWA: 566 mg/m³ 8 hour(s). STEL: 150 ppm 15 minute(s).
phenyl ether	**EH40/2005 WELs (United Kingdom (UK), 8/2007).** TWA: 7.1 mg/m³ 8 hour(s). Form: Vapour TWA: 1 ppm 8 hour(s). Form: Vapour

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.

Exposure controls

Occupational exposure controls : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

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.

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.

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.

Eye 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 or dusts.

Skin 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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Physical state : Liquid.

Important health, safety and environmental information

Flash point : Closed cup: 77°C (170.6°F) [Grabner Miniflash Closed Cup]

Density : 0.904 g/cm^3 [20°C (68°F)]

9. PHYSICAL AND CHEMICAL PROPERTIES

10. STABILITY AND REACTIVITY

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Materials to avoid : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Toxicokinetics

Absorption : Not available.

Distribution : Not available.

Metabolism : Not available.

Elimination : Not available.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : Irritating to mouth, throat and stomach.

Skin contact : Irritating to skin. May cause sensitisation by skin contact.

Eye contact : No known significant effects or critical hazards.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Linalool	LD50 Dermal	Rabbit	5610 mg/kg	-
	LD50 Dermal	Rat	5610 mg/kg	-
	LD50 Intraperitoneal	Rat	307 mg/kg	-
	LD50 Oral	Rat	2790 mg/kg	-
Phenylethyl alcohol	LD50 Dermal	Rabbit	790 uL/kg	-
	LD50 Oral	Rat	1790 mg/kg	-
	LD50 Oral	Rat	1800 mg/kg	-
propanedioic acid, diethyl ester	LD50 Dermal	Rabbit	>16 mL/kg	-
	LD50 Oral	Rat	14900 uL/kg	-
octanal, 2-(phenylmethylene)-	LD50 Oral	Rat	4650 mg/kg	-
	LD50 Oral	Rat	3100 mg/kg	-
2-(4-tert-Butylbenzyl)propionaldehyde	LD50 Oral	Rat	1390 mg/kg	-
Citronellal	LD50 Dermal	Rabbit	>2500 mg/kg	-
	LD50 Oral	Rat	2420 mg/kg	-
turpentine, oil Any of the volatile predominately terpenic fractions or distillates resulting from the solvent extraction of, gum collection from, or pulping of softwoods. Composed primarily of the C10H16 terpene hydrocarbons: α-pinene, β-pinene, limonene, 3-carene, camphene. May contain other acyclic, monocyclic, or bicyclic terpenes, oxygenated terpenes, and anethole. Exact composition varies with refening methods and the age, location, and species of the softwood source.	LD50 Oral	Rat	5760 mg/kg	-
	LDLo Dermal	Rabbit	5010 mg/kg	-
	TDLo Subcutaneous	Rat	1 mL/kg	-
	LC50 Inhalation Vapour	Rat	12 gm/m3	6 hours
	LC50 Inhalation Vapour	Rat	13700 mg/m3	4 hours
	LC50 Inhalation Vapour	Rat	16600 mg/m3	2 hours
dl-Citronellol	LD50 Dermal	Rabbit	2650 mg/kg	-

11. TOXICOLOGICAL INFORMATION

	LD50 Oral	Rat	5 gm/kg	-
	LD50 Oral	Rat	3450 mg/kg	-
	TDLo Oral	Rat	5 gm/kg	-
phenyl ether	LD50 Dermal	Rabbit	>7940 mg/kg	-
	LD50 Oral	Rat	4000 mg/kg	-
	LD50 Oral	Rat	2450 mg/kg	-
(R)-p-mentha-1,8-diene	LD50 Dermal	Rabbit	>5 gm/kg	-
	LD50 Intraperitoneal	Rat	3600 mg/kg	-
	LD50 Intravenous	Rat	110 mg/kg	-
	LD50 Oral	Rat	4400 mg/kg	-
	LDLo Subcutaneous	Rat	30200 mg/kg	-
terpinolene	LD50 Oral	Rat	4390 mg/kg	-
pinene	LD50 Oral	Rat	3700 mg/kg	-
	LD50 Unreported	Rat	3700 mg/kg	-

Conclusion/Summary : Not available.

Potential chronic health effects

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitiser

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Chronic effects : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : No specific data.

Ingestion : No specific data.

Skin : Adverse symptoms may include the following:
irritation
redness

Eyes : No specific data.

12. ECOLOGICAL INFORMATION

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

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure

12. ECOLOGICAL INFORMATION

propanedioic acid, diethyl ester	-	Acute LC50 17400 to 19500 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 28 days - 19.8 mm - 0.12 g	96 hours
	-	Acute LC50 15600 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 26 to 34 days	96 hours
	-	Acute LC50 15500 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 26 to 34 days	96 hours
	-	Acute LC50 15400 to 16900 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 33 days - 22 mm - 0.152 g	96 hours
	-	Acute LC50 11800 to 13400 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 28 days - 22 mm - 0.165 g	96 hours
	-	Acute LC50 10800 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 26 to 34 days	96 hours
phenyl ether	-	Acute LC50 2.4 to 3.2 ppm Marine water	Fish - Sheepshead minnow - Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) - 8 to 15 mm	96 hours
	-	Acute LC50 4000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 30 days	96 hours
	-	Acute LC50 670 to 1100 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
	-	Chronic NOEC 1 ppm Marine water	Fish - Sheepshead minnow -	96 hours

12. ECOLOGICAL INFORMATION

			Cyprinodon variegatus - Juvenile (Fledgling, Hatchling, Weanling) - 8 to 15 mm	
(R)-p-mentha-1,8-diene	-	Acute EC50 69600 ug/L Fresh water	Daphnia - Water flea - Daphnia pulex - Neonate - <24 hours	48 hours
	-	Acute LC50 35000 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	4 days
	-	Acute LC50 702 to 796 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas - 3234 days - 21.8 mm - 0.177 g	96 hours
pinene	-	Acute LC50 41000 to 62000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - <24 hours	48 hours
a-Cedrene	-	Acute EC50 44 ug/L Fresh water	Daphnia - Water flea - Daphnia pulex - Neonate - <24 hours	48 hours

Conclusion/Summary : Not available.

Persistence/degradability

Conclusion/Summary : Not available.

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

PBT : Not applicable.

vPvB : Not applicable.

13. DISPOSAL CONSIDERATIONS

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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

14. TRANSPORT INFORMATION

International transport regulations

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

14. TRANSPORT INFORMATION

PG* : Packing group

15. REGULATORY INFORMATION

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

EU regulations

Classification and labeling 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 or symbols :

Irritant

Risk phrases : R38- Irritating to skin.
R43- May cause sensitisation by skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S2- Keep out of the reach of children.
S24- Avoid contact with skin.
S37- Wear suitable gloves.
S46- If swallowed, seek medical advice immediately and show this container or label.

Contains : octanal, 2-(phenylmethylene)-

Product use : Consumer applications.

Europe inventory : All components are listed or exempted.

Black List Chemicals : Not listed

Priority List Chemicals : Not listed

Integrated pollution prevention and control list (IPPC) - Air : Not listed

Integrated pollution prevention and control list (IPPC) - Water : Not listed

Prior Informed Consent. List of chemicals subject to the international PIC procedure (Part I, II, III) : Not listed

International regulations

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

16. OTHER INFORMATION

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK) : R10- Flammable.
R22- Harmful if swallowed.
R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R65- Harmful: may cause lung damage if swallowed.
R36- Irritating to eyes.
R38- Irritating to skin.
R36/38- Irritating to eyes and skin.
R43- May cause sensitisation by skin contact.
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

16. OTHER INFORMATION

aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK) : Xn - Harmful
Xi - Irritant
N - Dangerous for the environment

Restrictions on use

Sector of Use	Chemical Product Category	Process Category	Article Category

None identified.

History

Date of printing : 11/12/2008.

Date of issue/ Date of revision : 11/12/2008.

Date of previous issue : No previous validation.

Version : 1

Prepared by : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
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.

Annex