



PRODUCT SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND MANUFACTURER

1.1 PRODUCT NAME	COMPOUND BENZOIN TINCTURE BP
1.2 PRODUCT CODE	BE/75
1.3 INTENDED USE	Pharmaceutical Ingredient
1.4 MANUFACTURER	William Ransom and Son plc.
1.5 ADDRESS	53 Mead Industrial Estate, Burymead Road, Hitchin, Herts, SG5 1RT, United Kingdom.
1.6 TELEPHONE/FAX NUMBER	0044 (0)1462 437615 / 0044 (0)1462 420528
1.7 DATE ISSUED	14 th March 2011

2. COMPOSITION / INFORMATION ON INGREDIENTS

2.1 COMPOSITION	A product manufactured from 2.0%w/v Aloes (CAS No. 8001-97-6), 10%w/v Styrax Benzoin Resin, 10%w/v Prepared Storax (CAS 8046-19-3) and containing approximately 73%v/v Ethanol (CAS No 64-17-5) and water.			
2.2 HAZARDOUS COMPONENTS				
	Constituent	Typical	EC Number	Classification
	Ethanol Prepared Storax	73%v/v 10%w/v	200-578-6 232-458-4	F: R11 Xi: R43
2.3 CAS NUMBER	Not classified			

3. HAZARD IDENTIFICATION

3.1 PRIMARY HAZARDS	HIGHLY FLAMMABLE. IRRITANT.
3.2 HEALTH EFFECTS	
EYES	Will cause conjunctival irritation and transient corneal damage. Vapour may cause conjunctival irritation.
INGESTION	Principle effect from ethanol is central nervous system depression, which may cause headaches, nausea, vomiting, muscular incoordination, loss of consciousness and respiratory failure. Aspiration during swallowing or vomiting will damage lungs.
INHALATION	Aloes may cause gastro-intestinal irritation and diarrhoea. Vapour concentrations in excess of the occupational exposure limit may cause irritation of the eyes, nose and throat (Ethanol). High concentrations will produce central nervous system depression and symptoms and effects similar to those for ingestion (Ethanol).
SKIN	May cause skin sensitisation on contact. Repeated or prolonged contact may cause eczema and dermatitis. Unlikely to be absorbed through the skin in harmful amounts.

4. FIRST AID MEASURES

4.1 EYES	Remove contact lenses if possible. Irrigate eyes with water or eye wash solution for at least fifteen minutes holding the eye open. Seek medical attention immediately.
4.2 INGESTION	Wash mouth out thoroughly with water. DO NOT INDUCE VOMITING. If there are any difficulties with breathing give oxygen; if breathing stops or gives signs of failing apply artificial respiration and seek medical assistance immediately.

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- 4.3 INHALATION Remove to fresh air, keep warm and at rest. If there are any difficulties with breathing give oxygen; if breathing stops or gives signs of failing apply artificial respiration and seek medical assistance immediately.
- 4.4 SKIN Remove contaminated clothing; this should not be worn again until it has been laundered. Wash contaminated skin with soap and water. Seek medical assistance if irritation persists or if severe reactions are experienced.
- 4.5 ADVICE TO PHYSICIANS Treat ingestion / inhalation as alcoholic poisoning.
- 5. FIRE FIGHTING MEASURES**
- 5.1 EXTINGUISHING MEDIA Water spray, AFFF foam, chemical dry powder or carbon dioxide.
- 5.2 UNSUITABLE EXTINGUISHING MEDIA Water jet.
- 5.3 SPECIAL HAZARDS Burning will produce acrid smoke, irritating fumes, carbon monoxide and carbon dioxide.
- 5.4 PROTECTIVE EQUIPMENT Self contained breathing apparatus.
- 6. ACCIDENTAL RELEASE MEASURES**
- 6.1 PERSONAL PRECAUTIONS Use in a well ventilated area away from sources of ignition.
- 6.2 ENVIRONMENTAL PRECAUTIONS Do not allow product to enter drains and watercourses. Inform local authority and fire service if preparation enters drains or watercourses.
- 6.3 SPILLAGE Absorb spillage using a proprietary absorbent or sand, scoop up and place in a suitable container; remove to a safe place and dispose of through a licensed waste disposal contractor. Ventilate area thoroughly. Wash contaminated area thoroughly with water and detergent. Any product residues may be removed with Industrial Methylated Spirit.
- 7. HANDLING AND STORAGE**
- 7.1 HANDLING Use in a well-ventilated area. Avoid static build up when pouring; earthing of container and receptacle may be required.
- 7.2 STORAGE Store in well closed containers, away from heat and source of ignition.
Attention is drawn to the Dangerous Substances and Explosive Atmosphere Regulations 2002 for the storage of containers of over 500ml in size.
- 8. EXPOSURE CONTROL/PERSONAL PROTECTION**
- 8.1 OCCUPATIONAL EXPOSURE STANDARDS 1000ppm or 1900mg/m³ 8 hour TWA (Ethanol).
- 8.2 ENGINEERING CONTROL MEASURES Local exhaust ventilation.
- 8.3 EYE PROTECTION Goggles or face-shield.
- 8.4 GENERAL PROTECTION Overalls and PVC apron.
- 8.5 RESPIRATORY PROTECTION Organic vapour respirator.
- 8.6 SKIN/HAND/PROTECTION Suitable protective gloves, eg. PVC or Nitrile rubber.

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9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 PHYSICAL STATE	Liquid.
9.2 COLOUR	Dark amber/brown.
9.3 ODOUR	Characteristic odour of benzoin.
9.4 pH	No test data.
9.5 BOILING POINT °C	>78.0
9.6 FLASH POINT °C	17 (closed cup)
9.7 EXPLOSION LIMITS	Lower Limit 3.5%v/v Upper Limit 19.0%v/v for Ethanol
9.8 SOLUBILITY IN WATER	Partially soluble with precipitation.
9.9 SOLUBILITY IN	Alcohol.
9.10 VAPOUR PRESSURE (hPa)	No test data.
9.11 WEIGHT (g/ml)	0.880 –0.910 at 20°C.
9.12 FLAMMABILITY	Flammable.
9.13 AUTO-IGNITION (°C)	>365
9.14 EXPLOSIVE PROPERTIES	Moderate/severe in an enclosed space in the presence of a source of ignition.
9.15 OXIDISING PROPERTIES	None reported.
9.16 VISCOSITY (cSt)	No test data.
9.17 VAPOUR DENSITY (AIR=1)	No test data.
9.18 DECOMPOSITION	
TEMPERATURE (°C)	No test data.
9.19 DUST EXPLOSION DATA	Not applicable.

10 STABILITY AND REACTIVITY

10.1 STABILITY	Stable.
10.2 CONDITIONS TO AVOID	Exposure to sources of ignition and high temperatures.
10.3 MATERIALS TO AVOID	Oxidising agents, concentrated nitric acid and sulphuric acid.
10.4 HAZARDOUS DECOMPOSITION PRODUCTS	Decomposition will produce acrid smoke, irritating fumes, carbon dioxide and carbon monoxide.

11 TOXICOLOGICAL INFORMATION

11.1 ACUTE TOXICITY	Ethanol: LD50 Oral Rat 7060mg/kg
11.2 EYE IRRITANT	Yes (Ethanol).
11.3 SKIN IRRITANT	May cause skin irritation.
11.4 SKIN SENSITISATION	May cause skin sensitisation.
11.5 SUB-ACUTE/SUBCHRONIC TOXICITY	No data.
11.6 CHRONIC TOXICITY/ CARCINOGENITY	None reported.
11.7 GENOTOXICITY	None reported.
11.8 REPRODUCTIVE/ DEVELOPMENTAL TOXICITY	Ethanol - Adverse effects on the male reproductive system have been reported in laboratory animals following repeated exposure. Developmental effects have been observed in laboratory animals
11.9 HUMAN DATA	In humans excessive consumption of alcoholic beverages during pregnancy is associated with the induction of Foetal Alcohol Syndrome in the offspring. Reduced birth weight and physical and mental defects occur. There is no evidence that such effects might be caused by exposures other than direct ingestion of alcoholic drinks.
11.10 ADDITIONAL DATA	Nil.

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12 ECOLOGICAL INFORMATION

12.1 MOBILITY	Expected to be mobile in the environment.
12.2 PERSISTANCE/ DEGRADABILITY	Readily biodegradable.
12.3 BIO-ACCUMULATION	No data available.
12.4 ECOTOXITY	No data available.

13 DISPOSAL

13.1 PRODUCT DISPOSAL	Through licensed waste disposable contractor.
13.2 CONTAINER DISPOSAL	Wash out container, remove labels and send for recycling.

14 TRANSPORT INFORMATION

	NUMBER	PROPER SHIPPING NAME	CLASS	SUBSIDIARY RISK	PACK GROUP	
14.1 ADR INFO	1293	Tinctures, medicinal	3	None	II	Hazard Ident No. 33 Transport Category 2 (Tunnel Restriction Code D/E)
14.2 IMDG INFO	1293	Tinctures, medicinal	3	None	II	EmS F-E, S-D
14.3 IATA INFO	1293	Tinctures, medicinal	3	None	II	Packaging instructions 305 & Y305 passenger aircraft Packaging instructions 307 cargo aircraft. ERG Code 3L.

15 REGULATORY INFORMATION

15.1 EC CLASSIFICATION	
HEALTH	IRRITANT
PHYSICO	
CHEMICAL PROPERTIES	HIGHLY FLAMMABLE
ENVIRONMENTAL	Not classified.
15.2 RISK PHRASES	R11 Highly flammable. R43 May cause sensitisation by skin contact
15.3 SAFETY PHRASES	S9 Keep container in a well ventilated place. S16 Keep away from sources of ignition – No smoking. S24 Avoid contact with skin S37 Wear suitable gloves

16 NATIONAL LEGISLATION

- 16.1 Chemicals (Hazard Information And Packaging For Supply) Regulations 2002 (as amended)
- 16.2 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004.
- 16.3 Dangerous Substances and Explosive Atmosphere Regulations 2002.

17 OTHER INFORMATION

- 17.1 REFERENCES USED
1. Martindale, 35th edition, pages 1462 (Ethanol), 2168 (Aloes), 1632 (Storax) and 2163 (Benzoin).
 2. Micromedex Poisindex(R) Substance Identification (Ethanol).
 3. Sax's Dangerous Properties of Industrial Materials, eighth edition, page 1572 EFU000 (Ethyl Alcohol).
 4. Potter's New Cyclopaedia of Botanical Drugs and Preparations 1988 edition, page 29 (Benzoin).
 5. Frutarom Safety Data Sheet for Prepared Storax.

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17.2 FULL LIST OF R-PHRASES USED
IN SECTION 2.2

R11 – Highly Flammable
R43 - May cause sensitisation by skin contact

17.3 PRODUCT SAFETY DATA SHEET
FIRST ISSUED

14th January 1988

17.4 PRODUCT SAFETY DATA SHEET
REVISED

11th March 2011

17.5 REASON FOR REVISION

Updated with regards to ingredient MSDS.

17.6 ISSUE STANDARD

8

17.7 APPROVED BY



Quality Assurance/Compliance Manager

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