

SAFETY DATA SHEET

Aroma Kit Solutions

(Primarily DENATURED ETHANOL)

Note

Each reference aroma solution is typically a dilute solution (< or equal to 1% w/w) of specific aroma molecules with low olfactory thresholds. The solvent is typically an ethanol/pure water mixture – typically 80%/20% wt/wt.

As the reference solutions are designed to be sniffed on smelling strips – EXCLUSIVELY - and no ingestion of the solutions is permitted – and the aroma molecules (most of which are permitted in foodstuffs) are at such a low level – the major hazard of the solutions is judged to be the ethanol (typically at a 80% wt/wt level).

We provide below the standard chemical industry data for 99% ethanol. The Aroma Kit solutions will have a lower hazard category.

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name

Aroma Academy

Manufacturer/Supplier

Scent & Aroma Technology Systems Limited

Address

23 Henderson Drive, Inverness, Scotland, IV1 1TR

Phone Number

01463 221132

Emergency Phone Number

01445 731 596

E-mail

enoegroeg@gmail.com

2. COMPOSITION / INFORMATION ON THE COMPONENTS

Product Formal Name

Aroma Academy Aroma Kit Solutions

Product Chemical Family

Aliphatic alcohol

CAS Number

64-17-5

EINECS / ELINCS

200-578-6

3. HAZARD IDENTIFICATION

This substance is classified as dangerous according to Directive 1999/45/EEC as amended and adapted

Main Hazards:

Physical/chemical hazards :

Highly flammable

Human health hazards

Not classified as dangerous

Environmental hazards

Not classified as dangerous

Health Effects – Eyes

May cause transient eye irritation

Health Effects – Skin

Unlikely to cause appreciable irritation even on repeated contact. Unlikely to be absorbed in harmful amounts.

Health Effects – Ingestion

Swallowing may have the following effects:- central nervous system depression, nausea/vomiting, loss of coordination, symptoms similar to alcohol intoxication.

Health Effects –Inhalation

Inhalation of vapours may cause headaches, dizziness, drowsiness and nausea.

4. FIRST AID MEASURES

First Aid – Eyes : In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Get medical attention if irritation occurs.

First Aid – Skin : In case of prolonged or repeated contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

First Aid – Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

First Aid – Inhalation : If inhaled, remove to fresh air. Get medical attention if symptoms appear.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable Extinguishing Media

Do not use water jet.

Hazardous decomposition products:

None

Unusual fire/explosion hazards

None

Special fire-fighting procedures

These products are carbon oxides (CO1 CO2) Highly flammable liquid and vapour. Vapour may cause flash fire. Vapours may accumulate in low or confined areas, travel a considerable distance to a source of ignition and flash back. May re-ignite itself after fire is extinguished. Vapours may form explosive mixtures with air. Hot containers may explode.

DO NOT FIGHT FIRE WHEN IT REACHES MATERIAL. Withdraw from fire and let it burn.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. First move people out of line-of-sight of the scene and away from windows. Cool closed containers exposed to fire with water.

Protective Equipment for Fire-fighting

Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

6. ACCIDENTAL RELEASE MEASURES

Environmental Precautions

If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilt material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.

Personal Precautions

Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (See Section 'Exposure controls. personal protection'). Follow all fire fighting procedures (See Section: 'Fire-fighting measures')> Do not touch or walk through spilled material. Personal protection in case of spillage : Splash goggles. Full suit. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product.

7. HANDLING AND STORAGE

Handling

Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Avoid inhalation of vapour and spray mist. Avoid contact with eyes, skin and clothing.

Storage

Store in a segregated and approved area. Keep container in a cool, well ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Standards

EH40-WEL (United Kingdom (UK), 1.2005)

TWA: 1920 mg/m³ 8 hour(s)

TWA: 1000 ppm 8 hour(s)

Control Measures

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure 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.

Respiratory Protection

Use with adequate ventilation. If ventilation is inadequate, use certified respirator that will protect against organic vapour.

Skin and body

Avoid contact with skin. Wear clothing and footwear that cannot be penetrated by chemicals or oil.

Hand Protection

Wear gloves that cannot be penetrated by chemicals or oil. (Butyl rubber gloves. Neoprene gloves. Nitrile gloves.)

Eye Protection

Chemical goggles or face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

Colour

Varied

Odour

Alcohol-like

Boiling Range/Point (deg C)

78

Density

789 to 807 kg/m³ (0.789 to 0.807 g/cm³)

Vapour density (Air = 1)

1.59

Solubility

Easily soluble in cold water

LogKow

The product is more soluble in water; log (octanol/water) = 0.32

10. STABILITY AND REACTIVITY

Conditions to Avoid

High temperatures. Keep away from sources of ignition.

Incompatibility with various substances

Incompatibility: oxidising agents, acids

Hazardous polymerisation

Will not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Oral LD50 (rat) 6200-17800mg/kg. Inhalation LC50 (rat) 8000mg/litre/4h. Dermal LD50 (rabbit) >20000mg/kg.

Irritancy – Eyes

The eye irritancy has been investigated by OECD Test method 405. Single application to the rabbit eye produced conjunctival irritation and transient corneal damage. The effect was insufficient to warrant classification as an eye irritant.

Irritancy – Skin

A single 4h semi-occlusive application to intact rabbit skin produced minimal signs of irritation (mean scores for erythema or oedema less than 2).

Skin Sensitisation

The material is not sensitising in standard animal tests. In rare cases non-irritant contact dermatitis has been identified in humans after skin exposure to this material. Such cases have been identified as delayed hypersensitivity or as urticarial reactions. In reactive individuals such reactions may also be elicited by drinking alcoholic drinks or by cross reaction to certain other alcohols.

Sub-acute/Subchronic Toxicity

It has been shown in many animal experiments that the repeated oral consumption of large doses of ethanol can lead to damage in practically all organ systems. The main manifestations of the toxic effects are shown by the liver.

Chronic Toxicity/Carcinogenicity Genotoxicity

No convincing evidence of carcinogenic effects in animal studies.

The product has been tested in a number of bacterial and mammalian systems. The product did not exhibit mutagenic activity in the following systems (with and without metabolic activation): *Drosophila*. *Salmonella typhimurium*. Human lymphocytes in vitro. Most in vitro tests and all in vivo tests for chromosome aberrations report negative results. The product did not induce micronuclei in standard bone marrow tests in vivo. There is some evidence that ethanol both induces SCE in vivo and can also act as an auegen at high doses. Overall, there is no robust evidence that ethanol is a genotoxic hazard according to the criteria normally applied for the purpose of classification and labelling of industrial chemical.

Reproductive Development Toxicity

Adverse effects on the male reproductive system have been reported in laboratory animals following repeated exposure to high concentrations. Developmental effects have been observed in laboratory animals following large oral exposures.

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. In humans high lifetime consumption of alcoholic beverages can be associated with certain cancers and effects on the liver. There is no evidence that these can be caused by exposure other than direct ingestion of alcoholic drinks (IARC 1988).

12. ECOLOGICAL INFORMATION

Mobility

This product is likely to volatilise rapidly into the air because of its high vapour pressure. The product is poorly absorbed onto soils or sediments.

Persistence/Degradability

This product is readily biodegradable.

Bio-accumulation potential

Product is not expected to bioaccumulate through food chains in the environment.

Environmental hazards

Not classified as dangerous

Other ecological information

Not toxic. Acute LC50/EC50 values for fish, invertebrates and algae typically >1000 mg/l.

13. DISPOSAL

Disposal Consideration /Waste information

Dispose of in accordance with all applicable local and national regulations. Avoid contact of spilled material and run off with soil and surface waterways. Consult an environmental professional to determine if local or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities.

14. TRANSPORT INFORMATION

UN Number - UN1170

Proper shipping name - Aroma Kit Solutions

Packaging Group II

ADR/RID Substance Identification Number UN1170

ADR/RID - Class 3

ADR/RID – Packing Group II

IMDG -Class 3

IMDG – Packing Group II

ADNR – Class 3

ADNR – Packing Group II

IATA - Class 3

IATA – Packing Group II

15. REGULATORY INFORMATION

Labelling Information

Highly Flammable



Risk phrases

R11: Highly flammable.

Safety phrases

S7: Keep container tightly closed.

S16: Keep away from sources of ignition - No Smoking.

EU regulations Classification and labelling have been performed according to EU directives 1999/45/EC and 67/548/EEC as amended and adapted.

Listed Inventories

AUSTRALIAN INVENTORY (AICS)
CANADA INVENTORY (DSL)
CHINA INVENTORY (IECS)
EC INVENTORY (EINECS/ELINCS)
JAPAN INVENTORY (ENCS)
KOREA INVENTORY (ECL)
PHILIPPINE INVENTORY (PICS)
US INVENTORY (TSCA)

16. OTHER INFORMATION

SDS first issued 21/04/13

Notice

This Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.