SAFETY DATA SHEET

1. Identification

Product identifier TERRASOL FCC

Other means of identification

BRI Product Code 818

3491 **FEMA** number

2-ETHYL FENCHOL FCC * 2-Ethyl-1,3,3-trimethyl-2-norbornanol * Synonyms

2-Ethyl-1,3,3-trimethylbicyclo[2.2.1]heptan-2-ol * Bicyclo[2.2.1]heptan-2-ol, 2-ethyl-1,3,3-trimethyl-

Recommended use

flavors and fragrances

For Manufacturing Use Only

Recommended restrictions

Not for use in Tobacco or Nicotine delivery device applications and/or products.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Bedoukian Research Company name **Address** 21 Finance Drive

Danbury, CT 06810

United States

Telephone 1-203-830-4000

Website www.bedoukian.com

E-mail customerservice@bedoukian.com

Contact person Joseph Bania

Chemtrec (North America) 1-800-424-9300 **Emergency phone number** 1-703-527-3887

Chemtrec (International)

2. Hazard(s) identification

Physical hazards Not classified. Health hazards Not classified.

Environmental hazards Not classified. **OSHA** defined hazards Not classified.

Label elements

None. Hazard symbol Signal word None.

Hazard statement The substance does not meet the criteria for classification.

Precautionary statement

Observe good industrial hygiene practices. Prevention

Wash hands after handling. Response

Store away from incompatible materials. Storage

Dispose of waste and residues in accordance with local authority requirements. Disposal

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Substances

Material name: TERRASOL FCC SDS US Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state

Liquid.

Color

Pale yellow

Odor

powerful earthy odor, patchouli top note

Odor threshold

Not available.

Hq

Not available.

Melting point/freezing point

Not available.

Initial boiling point and boiling

444.34 °F (229.08 °C) US EPA. 2014. Estimation Programs Interface Suite™ for Microsoft® Windows, v 4.11. US EPA, Washington, DC, USA.

range

200 °F (93 °C) Pensky-Martens or Grabner Miniflash

Evaporation rate

Not available.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flash point

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%)

Not available. Not available.

Explosive limit - upper (%)

0.0043 mmHg at 20°C; US EPA. 2014. Estimation Programs Interface Suite™ for Microsoft®

Vapor pressure

Windows, v 4.11. US EPA, Washington, DC, USA.

Vapor density

6.3 Relative to air; air = 1

Relative density

Not available.

Solubility(ies)

Solubility (water)

Not available.

Partition coefficient (n-octanol/water)

3.796 US EPA. 2014. Estimation Programs Interface Suite™ for Microsoft® Windows, v 4.11. US

EPA, Washington, DC, USA.

Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

Viscosity

Not available.

Other information

Density

0.946 - 0.967 g/cm3

Flammability class

Combustible IIIB estimated

Molecular formula

C12H22O

Molecular weight

182.30

Specific gravity

0.946 - 0.967 at 25°C

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Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

3.796, US EPA. 2014. Estimation Programs Interface Suite™ for Microsoft® Windows, v 4.11. US EPA, Washington, DC, USA.

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not established.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Material name: TERRASOL FCC 818 Version #: 01 Issue date: 05-20-2015 Disclaimer

BRI cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Material name: TERRASOL FCC SDS US