Creation date: 01.30.2012 Revision date: 02.28.2023 Version 3.2

SP/E

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name

Chemtane 2 Concentrate / Alkane Hydrocarbons (C<sub>4</sub>-C<sub>8</sub>) Formulated by Chemtane Energy LLC

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses" Industrial and professional. Uses advised against: Consumer use.

# 1.3. Details of the supplier of the safety data sheet (SDS) Company identification

Chemtane Energy LLC, 10106 Highway 63, Moss Point, MS 39562

Phone: (281) 573-1100; Fax (281) 573-1102

Contact in USA: Raymond Davis 281 382-1062; 888-536-4692

e-mail address rdavis@chemtane2.com

Customer Service: <a href="mailto:customerservice@chemtane2.com">customerservice@chemtane2.com</a>

Website: <a href="http://www.chemtaneenergy.com">http://www.chemtaneenergy.com</a>
Person responsible for placing on market:
Raymond Davis
10106 Highway 63

10106 Highway 63 Moss Point, MS 39562

#### 1.4. Emergency telephone numbers

Emergency Numbers 24/7
Domestic Emergencies
CHEMTREC#11781 – 800-424-9300
24 hrs – (703)527-3887
International Emergencies

SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

## Classification acc. Regulation (EC) No 1272/2008/EC (CLP/GHS)

Flammable liquid: 2-Highly flammable liquid and vapor Eye Irritation, Category 2B

PERS#11489-801-629-0667

Eye Irritation, Category 2B
Aspiration hazard: Aspiration Toxicity. 1 – May be fatal if

swallowed and enters airways.

Specific target organ toxicity - Single: STOT SE 3 – May

cause drowsiness or dizziness.

Aquatic Chronic 2 - Hazardous to the aquatic environment -

Toxic to aquatic life with long lasting effects

# 2.2. Label elements -Labeling Pictograms









- Signal word Danger

- Hazard Statements

H225 Highly flammable liquid and vapor H304 May be fatal if swallowed and enters

Airways
H320 Cause eye irritation

H336 May cause drowsiness or dizziness.

#### - Precautionary Statements

P370+P378

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240+P243 Ground/bond container and receiving

equipment. Take precautionary measures against static discharge

P273 Avoid release to the environment.
P280 Wear protective gloves and eye / face

protection.

P301+P310+P331 IF SWALLOWED: Immediately call a

POISON CENTER or doctor/physician.

Do NOT induce vomiting.

P403+P235 Store in a well-ventilated place. Keep

cool. Keep container tightly closed. In Case of Fire: Use Foam, carbon

dioxide or dry powder for extinction.

P501 Dispose of product/container in

accordance with all applicable

regulations.

SP/E

### Safety Data Sheet (SDS) Chemtane 2 Concentrate

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## SECTION 3: Composition/information on ingredients Substance / Mixture: Mixture.

#### 3.1. Substances

| Name                         | EC No.     | CAS No.    | Classification |  |  |  |  |
|------------------------------|------------|------------|----------------|--|--|--|--|
| n-Pentane                    | 203-692-4  | 109-66-0   | 50-75 %        |  |  |  |  |
| Isohexanes                   | 232-443-2  | 8030-30-6  | 1-5 %          |  |  |  |  |
| Methanol                     | 200-659-6  | 67-56-1    | 0.05 %         |  |  |  |  |
| Soltrol                      | 70024-92-9 | 68551-16-6 | 1-5 %          |  |  |  |  |
| Cyclopentane                 | 206-016-6  | 287-92-3   | 1-5 %          |  |  |  |  |
| 2-Methylpentane              | 203-523-4  | 107-83-5   | 1-2 %          |  |  |  |  |
| Isopentane                   | 201-142-8  | 78-78-4    | 1-5 %          |  |  |  |  |
| 2,3-Dimethylbutane 201-193-6 |            | 79-29-8    | 1-2 %          |  |  |  |  |
|                              |            |            |                |  |  |  |  |

Note: the concentration of methanol is <0.1 % & warning labels not required.

#### REACH Registration number: Not Required

Contains no other components or impurities which will influence the classification of the product.

#### 3.2. Mixtures

See 3.1 above for composition.

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### Inhalation

If breathing difficulties, dizziness, or light-headedness occur when working in areas with high vapor concentrations, remove victim to fresh air. If victim experiences continued breathing difficulties, keep patient warm and at rest, and seek medical attention. If breathing stops, begin artificial respiration and seek immediate medical attention.

#### Skin contact

If this product comes into contact with the skin, wash with soap and water. Seek medical attention if irritation persists. Remove and wash contaminated clothing before re-use.

#### Accidental eye contact

If this product comes into contact with the eyes, flush with large quantities of water for several minutes, while gently holding the eyelids open. Seek medical attention if irritation persists.

#### Ingestion

If this product is swallowed, DO NOT INDUCE VOMITING. Give small quantities (<250 ml) of water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention

#### Notes to doctor/physician

Aspiration of solvent may cause chemical pneumonitis.

# 4.2. Most important symptoms and effects, both acute and delayed

**Inhalation:** May cause dizziness and drowsiness if inhaled and high concentrations may result in central nervous system depression, and loss of consciousness.

**Ingestion:** Symptoms of ingestion may include nausea, vomiting, as well as symptoms of dizziness, drowsiness and central nervous system depression. If vomiting occurs, may be aspirated into the lungs, with a risk of chemical pneumonitis.

# 4.3. Indication of any immediate medical attention and special treatment needed

Get immediate medical advice/attention.

#### **SECTION 5: Fire fighting measures**

# 5.1. Extinguishing media Suitable extinguishing media

Small fires: Use foam, carbon dioxide or dry powder extinguisher.

Large fires: Use foam to extinguish fires. Water spray should not be used, as pentane is lighter than water and may form pools of burning liquid on top of water. Keep adjacent containers cool using water spray.

# 5.2. Special hazards arising from the substance or Mixture

Product is extremely flammable. Remove all sources of ignition. Vapours are heavier than air and may travel considerable distances to a source of ignition and flash back. Vapour/air mixtures may be explosive. Electrostatic discharges may cause fire and/or explosion.

# 5.3. Advice for fire-fighters Specific methods

Wear positive pressure Self-Contained Breathing Apparatus. If possible, stop flow of product. Move container away or cool with water spray from a protected position. If leaking do not extinguish a flame unless absolutely necessary.

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#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Remove all ignition sources and evacuate unnecessary personnel from the area. Ventilate the area if possible.

Wear suitable protective clothing including solvent resistant gloves and coveralls. If vapour concentrations are high, respiratory protective equipment may be required. See section 8 for more information.

#### 6.2. Environmental precautions

Prevent entry into sewers and watercourses. If product enters sewers or watercourses, inform the appropriate environmental authorities.

#### 6.3. Methods and material for containment and Cleaning up

Ventilate area. Keep away from ignition sources (including static discharges). Prevent evaporation by covering with foam. Absorb excess liquid spillage on inorganic adsorbent material such as fine sand, brick dust etc. Place spent adsorbent in sealed packages and contact specialist waste disposal contractor.

#### 6.4. Reference to other sections

See also sections 8 for personal protection details.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes. Use only in well ventilated areas. Chemtane 2 is highly flammable. Avoid contact with all ignition sources, including hot surfaces. Take precautions to avoid electrostatic discharges, such as grounding of containers and equipment, and restricting flow rates. Vapors are heavier than air and may accumulate in low lying areas and below ground areas such as ducts and sewers.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store in a well ventilated area, away from all ignition sources. If stored in drums, keep out of direct sunlight.

#### 7.3. Specific end use(s)

None.

### 8.1. Control parameters

**Exposure limit value** 

Value type

value Note

Great Britain - LTEL

600 ppm EH 40/07

#### OSHA. NIOSH

| Product/ingredient name | Туре          | Exposure<br>Long Term | Value<br>ppm | Value<br>mg/m³ | Effect |
|-------------------------|---------------|-----------------------|--------------|----------------|--------|
| <i>n</i> -pentane       | OSHA<br>NIOSH | Inhalation            | 1000         | 3000           | Sys    |
| Isopentane              | OSHA<br>NIOSH | Inhalation            | 1000         | 3000           | Sys    |
| methanol                | OSHA<br>NIOSH | Inhalation            | 200          | -              | Sys    |
| Soltrol 10              | OSHA<br>NIOSH | Inhalation            | 300          | Consumer       | Sys    |
| 2-methylpentane         | OSHA<br>NIOSH | Inhalation            | 1000         | 3000           | Sys    |

#### 8.2. Exposure controls

Ensure there is sufficient ventilation of the area. General mechanical ventilation may be sufficient to keep product vapor concentrations within specified time-weighted TLV ranges. If general ventilation proves inadequate to maintain safe vapor concentrations, supplemental local exhaust may be required. Other special precautions such as respiratory masks or environmental containment devices may be required in extreme cases.

#### Respiratory protection

Use only in well ventilated area. If high exposure levels are likely, then suitable respiratory protection will be required. Very high vapor concentrations may result in oxygen displacement and selfcontained breathing apparatus or airline may be required.

#### Hand protection

Wear suitable chemical resistant gloves recommended for use with hydrocarbon solvent. Nitrile gloves may be suitable, but glove manufacturers' specifications should always be checked first. Natural rubber gloves are not suitable. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

#### Eve protection

Wear suitable eye protection, safety glasses or goggles, when handling this product.

#### Skin protection

Aprons or coveralls made of fire retardant material are recommended. These should be changed after use or if contaminated. Wash before re-use.

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#### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical Properties

#### General information

Appearance/Colour: Light Green liquid.

Odour: Mild

Odour threshold:

Odour threshold is subjective and inadequate to warn for

over exposure.

Melting point: -135°C Boiling point: 37°C Flash point: -40 °C

Flammability range: 1,1 %(V) - 7,8%(V)Vapour Pressure 37,8 °C: 1,08 bar

Relative density, gas: 2,48 Solubility in water: 39 mg/l

Partition coefficient: n-octanol/water: No data available.

Autoignition temperature: 260 °C Relative density, liquid: 0,601 – 0,651 Viscosity 0,234 cp at 20 °C Explosion limits: LEL 1% UEL 6%

**SECTION 10: Stability and reactivity** 

#### 10.1. Reactivity

Stable under normal conditions.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Keep away from sources of ignition.

#### 10.5. Incompatible materials

This product is incompatible with strong oxidizing agents, strong acids and bases, and selected amines.

#### 10.6. Hazardous decomposition products

None

#### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute oral toxicity Value: LD50

Species: Rat

Value in non-standard unit: > 2.000 mg/kg

#### Acute inhalation toxicity

Value: LC50 Species: Rat

Value in non-standard unit: > 25,3 mg/l

Harmful when inhaled in high concentrations or ingested. Product may cause dizziness and drowsiness if inhaled, and high concentrations may result in central nervous system depression, and loss of consciousness. Symptoms of ingestion may include nausea, vomiting, as well as symptoms of dizziness, drowsiness and central nervous system depression. If vomiting occurs, may be aspirated into the lungs, with a risk of chemical pneumonitis.

Irritation: Can be irritating to the eye, may cause redness.

Corrosivity: Not corrosive

Sensitisation: Not known to be a sensitizer

Repeated dose toxicity: Prolonged or repeated contact of this product will result in defatting of the skin, causing dryness and cracking.

Carcinogenicity: Not expected to be carcinogenic.

Mutagenicity: Not expected to be mutagenic

Toxicity for reproduction: Not expected to be toxic to

reproduction.

Route of exposure: Inhalation and ingestion

Symptoms related to the physical, chemical and toxicological characteristics: Product may cause dizziness and drowsiness if inhaled and high concentrations may result in central nervous system depression, and loss of consciousness. Symptoms of ingestion may include nausea, vomiting, as well as symptoms of dizziness, drowsiness and central nervous system depression. If vomiting occurs, Product may be aspirated into the lungs, with a risk of chemical pneumonitis.

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

EC50 (Oncorhynchus mykiss, rainbow trout) 4.26 mg/l (96 hour) EC50 (Daphnia magna) 2.7 mg/l (48 hour)

May cause long-term adverse effects in the aquatic environment.

#### 12.2. Persistence and degradability

Product is readily biodegradable in aquatic systems, however, in view of its high evaporation rate, product is expected to volatilize rapidly from water sources into the atmosphere, where it will be degraded by photochemical reaction.

#### 12.3. Bioaccumulative potential

No information available

#### 12.4. Mobility in soil

No information available

#### 12.5. Results of PBT and vPvB assessment

No information available

#### 12.6. Other adverse effects

None

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#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Recover and recycle product if possible. If recovery and recycling are not possible, n-pentane may be disposed of by incineration.

Please follow all local, regional, and national and international laws.

## SECTION 14: Transport information ADR/RID

14.1. UN number

1993

### 14.2. UN proper shipping name

Flammable Liquids, n.o.s.

#### 14.3. Transport hazard class(es)

Class: 3

Classification Code: F1

Emergency Action Code: 3YE

Tunnel code: (D/E)

#### 14.4. Packing group PG II

#### 14.5. Environmental hazards

Environmentally Hazardous.

### 14.6. Special precautions for user

None.

#### IMDG

14.1. UN number

1993

#### 14.2. UN proper shipping name

Flammable Liquids, n.o.s.

#### 14.3. Transport hazard class(es)

Class: 3 (FLAMMABLE LIQUIDS)

EmS: F-E,S-D

#### 14.4. Packing group PG II

#### 14.5. Environmental hazards

**Environmentally Hazardous** 

### 14.6. Special precautions for user

None.

## 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Substance name: PENTANE (ALL ISOMERS)

Ship type required: 3

Pollution category: Y

#### IATA

14.1. UN number

1993

#### 14.2. UN proper shipping name

Flammable Liquids, n.o.s.

#### 14.3. Transport hazard class(es) Class: 3

Packing group PG II

#### 14.4. Packing group PG II

#### 14.5. Environmental hazards

Environmentally Hazardous.

#### **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Directive 96/82/EC: Covered.

#### 15.2. Chemical safety assessment

CSA has been carried out

#### **SECTION 16: Other information**

Ensure all national/local regulations are observed.

#### Advice

Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted. Details given in this document are believed to be correct at the time of going to press.

#### **Further information**

Note:

When using this document care should be taken, as the decimal sign and its position complies with rules for the structure and drafting of international standards, and is a comma on the line.

As an example, 2,000 is two (to three decimal places) and not two thousand, whilst 1.000 is one thousand and not one (to three decimal places).

#### **End of document**