

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.3
Revision Date 09.04.2020
Print Date 26.04.2020**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : Florida *n*-Hydrocarbon Mix

Product Number : 46855-U

Brand : Supelco

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Company, LTD.
The Old Brickyard
NEW ROAD, GILLINGHAM , DORSET
SP8 4XT
UNITED KINGDOM

Telephone : +44 (0)1747 833-000

Fax : +44 (0)1747 833-313

E-mail address : TechnicalService@merckgroup.com

1.4 Emergency telephone number

Emergency Phone # : +44 (0)870 8200418 (CHEMTREC)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Flammable liquids (Category 2), H225

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Carcinogenicity (Category 2), H351

Reproductive toxicity (Category 2), H361fd

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Specific target organ toxicity - repeated exposure (Category 1), Peripheral nervous system,
Central nervous system, Cardio-vascular system, Eyes, H372

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements**Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word

Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H372 Causes damage to organs (Peripheral nervous system, Central nervous system, Cardio-vascular system, Eyes) through prolonged or repeated exposure.

Precautionary statement(s)

P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Supplemental Hazard Statements

none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Stench.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component		Classification	Concentration
Methylene chloride			
CAS-No.	75-09-2	Skin Irrit. 2; Eye Irrit. 2; Carc. 2; STOT SE 3; H315, H319, H351, H336 Concentration limits: 20 %: STOT SE 3, H336;	>= 30 - < 50 %
EC-No.	200-838-9		
Index-No.	602-004-00-3		
Carbon disulphide			
CAS-No.	75-15-0	Flam. Liq. 2; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Repr. 2; STOT RE 1; H225, H332, H315, H319, H361fd, H372 Concentration limits: >= 1 %: Repr. 2, H361fd; >= 1 %: STOT RE	>= 30 - < 50 %
EC-No.	200-843-6		
Index-No.	006-003-00-3		

		1, H372; 0.2 - < 1 %: STOT RE 2, H373;	
n-octane			
CAS-No.	111-65-9	Flam. Liq. 2; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1; H225, H315, H336, H304, H400, H410 M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 1	>= 0.1 - < 0.25 %
EC-No.	203-892-1		
Index-No.	601-009-00-8		
Dodecane			
CAS-No.	112-40-3	Asp. Tox. 1; Aquatic Acute 1; H304, H400 M-Factor - Aquatic Acute: 1	>= 0.1 - < 0.25 %
EC-No.	203-967-9		

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Dry powder Dry sand

Unsuitable extinguishing media

Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Sulphur oxides, Hydrogen chloride gas

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Store at room temperature. Refrigerate before opening. Store under inert gas. Heat sensitive.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Methylene chloride	75-09-2	TWA	100 ppm 350 mg/m3	UK. EH40 WEL - Workplace Exposure Limits
	Remarks	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.		
		TWA	100 ppm 353 mg/m3	Commission Directive (EU) 2017/164 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU
		Identifies the possibility of significant uptake through the skin Indicative		
		STEL	200 ppm 706 mg/m3	Commission Directive (EU) 2017/164 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU
		Identifies the possibility of significant uptake through the skin Indicative		
		STEL	300 ppm 1,060 mg/m3	UK. EH40 WEL - Workplace Exposure Limits
		Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.		
Carbon disulphide	75-15-0	TWA	5 ppm 15 mg/m3	UK. EH40 WEL - Workplace Exposure Limits
		Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used		
		TWA	5 ppm 15 mg/m3	Europe. COMMISSION DIRECTIVE 2009/161/EU establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
		Identifies the possibility of significant uptake through the skin Indicative		

Biological occupational exposure limits

Component	CAS-No.	Parameters	Value	Biological specimen	Basis
Methylene chloride	75-09-2	Carbon monoxide	30parts per million	End-tidal breath	UK. Biological monitoring guidance values
	Remarks	After shift			

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|--------------------|------------------------------------|
| a) Appearance | Form: liquid
Colour: colourless |
| b) Odour | Stench. |
| c) Odour Threshold | No data available |
| d) pH | No data available |

e) Melting point/freezing point	Melting point/range: -97 °C
f) Initial boiling point and boiling range	40 °C at 1013 hPa
g) Flash point	-30 °C - closed cup
h) Evaporation rate	0.71
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	Upper explosion limit: 19 %(V) Lower explosion limit: 12 %(V)
k) Vapour pressure	465 hPa at 20 °C
l) Vapour density	No data available
m) Relative density	1.320 g/cm ³
n) Water solubility	soluble
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Zinc, Bases, Oxidizing agents, Alkali metals, Strong acids and strong bases, Strong oxidizing agents, Amines, Strong acids, Vinyl compounds, Aluminum, Magnesium, Azides

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, Hydrogen chloride gas

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 2A - Group 2A: Probably carcinogenic to humans (Methylene chloride)

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood., Acts as a simple asphyxiant by displacing air., anesthetic effects, Breathing difficulties, Headache, Dizziness, Prolonged or repeated contact with skin may cause:, defatting, Dermatitis, Contact with eyes can cause:, Redness, Blurred vision, Provokes tears.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

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The life science business of Merck operates as MilliporeSigma in the US and Canada



This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Toxic to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 1992

IMDG: 1992

IATA: 1992

14.2 UN proper shipping name

ADR/RID: FLAMMABLE LIQUID, TOXIC, N.O.S. (Dichloromethane, Carbon disulphide)

IMDG: FLAMMABLE LIQUID, TOXIC, N.O.S. (Dichloromethane, Carbon disulphide)

IATA: Flammable liquid, toxic, n.o.s. (Dichloromethane, Carbon disulphide)

14.3 Transport hazard class(es)

ADR/RID: 3 (6.1)

IMDG: 3 (6.1)

IATA: 3 (6.1)

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

: Methylene chloride

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs (/\$/*_ORGAN_REPEAT/\$/) through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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