

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.7 Revision Date 05.02.2025 Print Date 02.05.2025

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1 Product identifiers

Product name : *n*-Paraffin Mix C18,C20,C22,C24

Product Number : 47108 Brand : Supelco

Index-No. : 601-009-00-8

REACH No. : This product is a mixture. REACH Registration Number see

section 3.

CAS-No. : 111-65-9

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3

CHEMIKART

### 1.4 Emergency telephone

Emergency Phone # : 000 800 1007 141 (CHEMTREC)

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

Flammable liquids, (Category 2) H225: Highly flammable liquid and vapor.

Skin irritation, (Category 2) H315: Causes skin irritation.

Specific target organ toxicity - single exposure, (Category 3),

Central nervous system

H336: May cause drowsiness or dizziness.

Aspiration hazard, (Category 1) H304: May be fatal if swallowed and enters

airways.

Short-term (acute) aquatic

hazard, (Category 1)

H400: Very toxic to aquatic life.

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Long-term (chronic) aquatic hazard, (Category 1)

H410: Very toxic to aquatic life with long

lasting effects.

### 2.2 Label elements

### Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word Danger

Hazard Statements

H225 Highly flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements** 

P210 Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

P233 Keep container tightly closed.
P273 Avoid release to the environment.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water.

P331 Do NOT induce vomiting.

Supplemental Hazard

Statements

none

### Reduced Labeling (<= 125 ml)

Pictogram

Signal Word Danger

Hazard Statements

H304 May be fatal if swallowed and enters airways.

**Precautionary Statements** 

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331 Do NOT induce vomiting.

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.

### Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

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The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

# **SECTION 3: Composition/information on ingredients**

### 3.2 Mixtures

Formula : C8H18

Component		Classification	Concentration	
n-octane				
CAS-No. EC-No. Index-No.	111-65-9 203-892-1 601-009-00-8 *	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: 1	<= 100 %	
Icosane				
CAS-No. EC-No.	112-95-8 204-018-1 *	Asp. Tox. 1; H304	>= 1 - < 10 %	
n-octadecane				
CAS-No. EC-No.	593-45-3 209-790-3	Asp. Tox. 1; , H304	>= 1 - < 10 %	

<sup>\*</sup>A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, or the annual tonnage does not require a registration.

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**

Show this material safety data sheet to the doctor in attendance.

# If inhaled

After inhalation: fresh air. Call in physician.

### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

### In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

### If swallowed

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

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### 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

Foam Carbon dioxide (CO2) Dry powder

# Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

# **SECTION 6: Accidental release measures**

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

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

### Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

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### Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

### **Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

### Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

hygroscopic

# Storage class

Storage class (TRGS 510): 3: Flammable liquids

### 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

Ingredients with workplace control parameters

# 8.2 Exposure controls

Personal protective equipment

# Eye/face protection

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

### Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

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Break through time: 480 min

Material tested: KCL 741 Dermatril® L

required

# **Body Protection**

Flame retardant antistatic protective clothing.

### Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

# **Control of environmental exposure**

Do not let product enter drains. Risk of explosion.

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

# 9.1 Information on basic physical and chemical properties

a) Physical state liquid

b) Color No data available

c) Odor No data available

d) Melting No data available

point/freezing point

e) Initial boiling point 125 - 126 °C at 1.013 hPa

and boiling range

f) Flammability (solid, No data available

gas)

g) Upper/lower No data available

flammability or explosive limits

h) Flash pointi) AutoignitionNo data available

i) Autoignition temperature

j) Decomposition temperature

No data available

k) pH No data available

I) Viscosity Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

m) Water solubility No data availablen) Partition coefficient: No data available n-octanol/water

o) Vapor pressure 14,7 hPa at 20,0 °C

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p) Density No data available
 Relative density No data available
 q) Relative vapor No data available

density

r) Particle No data available

characteristics

s) Explosive properties Not classified as explosive.

t) Oxidizing properties none

# 9.2 Other safety information

No data available

# **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

Vapors may form explosive mixture with air.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

# 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Warming.

### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids

# 10.6 Hazardous decomposition products

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

### **Mixture**

### **Acute toxicity**

LD50 Oral - Rat - male and female - > 5.000 mg/kg

(OECD Test Guideline 401)

Remarks: The value is given in analogy to the following substances: isooctane

LC50 Inhalation - Rat - male and female - 4 h - > 24,88 mg/l - vapor

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

Remarks: The value is given in analogy to the following substances: isooctane

### Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

Skin - Rabbit

Result: Irritating to skin. - 24 h

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(OECD Test Guideline 404)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: isooctane

Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Remarks: Drying-out effect resulting in rough and chapped skin.

### Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation (OECD Test Guideline 405)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: isooctane

## Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Remarks: (in analogy to similar products)

# Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: The value is given in analogy to the following substances: n-heptaneTest Type:

Chromosome aberration test in vitro Test system: rat hepatocytes Method: OECD Test Guideline 473

Result: negative

Remarks: The value is given in analogy to the following substances: n-heptaneTest Type:

In vitro mammalian cell gene mutation test Test system: human lymphoblastoid cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Remarks: The value is given in analogy to the following substances:

isooctane Carcinogenicity

No data available

### Reproductive toxicity

No data available

### Specific target organ toxicity - single exposure

Mixture may cause drowsiness or dizziness.

### Specific target organ toxicity - repeated exposure

No data available

# **Aspiration hazard**

Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

### 11.2 Additional Information

# **Endocrine disrupting properties**

### **Product:**

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article

57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Central nervous system depression, narcosis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Vomiting, Central nervous system depression, narcosis

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Systemic effects:

After uptake of large quantities:

Headache
Dizziness
Nausea
Vomiting
agitation
somnolence
Drowsiness
Unconsciousness
respiratory arrest

It generally applies for aliphatic hydrocarbons with 6 - 18 carbon atoms that they may cause pneumonia, in some cases also pulmonary oedema, upon direct inhalation, i.e. in conditions that can occur only in very special circumstances (nebulizations, spraying, inhalation of aerosols and similar). After absorption of very large quantities: narcosis.

Handle in accordance with good industrial hygiene and safety practice.

### **Components**

### n-octane

### **Acute toxicity**

LD50 Oral - Rat - male and female - > 5.000 mg/kg

(OECD Test Guideline 401)

Remarks: The value is given in analogy to the following substances: isooctane

LC50 Inhalation - Rat - male and female - 4 h - > 24,88 mg/l - vapor

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male and female - > 2.000 mg/kg

(OECD Test Guideline 402)

Remarks: The value is given in analogy to the following substances: isooctane

# Skin corrosion/irritation

Skin - Rabbit

Result: Irritating to skin. - 24 h (OECD Test Guideline 404)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: isooctane

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Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table

3.1/3.2)

Remarks: Drying-out effect resulting in rough and chapped skin.

### Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation (OECD Test Guideline 405)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: isooctane

# Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

Remarks: (in analogy to similar products)

### Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Result: negative

Remarks: The value is given in analogy to the following substances: n-heptane

Test Type: Chromosome aberration test in vitro

Test system: rat hepatocytes

Result: negative

Remarks: The value is given in analogy to the following substances: n-heptane

Test Type: In vitro mammalian cell gene mutation test

Test system: human lymphoblastoid cells

Result: negative

Remarks: The value is given in analogy to the following substances: isooctane

# Carcinogenicity

No data available

### Reproductive toxicity

No data available

### Specific target organ toxicity - single exposure

Inhalation - May cause drowsiness or dizziness. - Central nervous system Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

# Specific target organ toxicity - repeated exposure

No data available

### **Aspiration hazard**

Aspiration may cause pulmonary edema and pneumonitis.

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### **Icosane**

### **Acute toxicity**

LD50 Oral - Rat - male and female - > 5.000 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 5.266 mg/m3 - dust/mist

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male and female - > 3.160 mg/kg

(OECD Test Guideline 402)

### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation (OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation (OECD Test Guideline 405)

# Respiratory or skin sensitization

Maximization Test - Guinea pig Result: Not a skin sensitizer. (OECD Test Guideline 406)

### Germ cell mutagenicity

Test Type: Ames test

Test system: S. typhimurium

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Method: OECD Test Guideline 474

Species: Mouse - male and female - Bone marrow

Result: negative

### Carcinogenicity

No data available

# 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**

May be fatal if swallowed and enters airways.

# n-octadecane

### **Acute toxicity**

LD50 Oral - Rat - male and female - > 5.000 mg/kg

(OECD Test Guideline 401) Inhalation: No data available Dermal: No data available

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### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation (OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation (OECD Test Guideline 405)

### Respiratory or skin sensitization

Maximization Test - Rat

Result: negative

(OECD Test Guideline 406)

# Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

Method: OECD Test Guideline 474 Species: Mouse - male and female

Result: negative

Method: OECD Test Guideline 475 Species: Rat - male and female

Result: negative

Method: OECD Test Guideline 485

Species: Mouse - male

Result: negative

Carcinogenicity

No data available

# **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**

May be fatal if swallowed and enters airways.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

### **Mixture**

Toxicity to fish LC50 - Oryzias latipes - 0,42 mg/l - 96,0 h

Remarks: (Lit.)

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Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 0,38 mg/l - 48 h

Remarks: (ECOTOX Database)

Toxicity to algae

NOEC - Pseudokirchneriella subcapitata (microalgae) - 5,8 mg/l - 72

Remarks: (Lit.)

Toxicity to daphnia and other aquatic

static test NOEC - Daphnia magna (Water flea) - 0,17 mg/l - 21 d

(OECD Test Guideline 211)

invertebrates(Chronic Remarks: (in analogy to similar products)

toxicity)

# 12.2 Persistence and degradability

aerobic - Exposure time 10 d Biodegradability

Result: 70,3 % - Readily biodegradable.

Remarks: (ECHA)

Theoretical oxygen  $3.500 \, \text{mg/g}$ demand Remarks: (Lit.)

# 12.3 Bioaccumulative potential

No data available

# 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

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 Endocrine disrupting properties

### **Product:**

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

No data available

# **Components**

### n-octane

LC50 - Oryzias latipes - 0,42 mg/l - 96,0 h Toxicity to fish

Remarks: (Lit.)

Toxicity to daphnia and other aquatic

static test EC50 - Daphnia magna (Water flea) - 0,38 mg/l - 48

invertebrates

Remarks: (ECOTOX Database)

NOEC - Pseudokirchneriella subcapitata (microalgae) - 5,8 mg/l Toxicity to algae

- 72 h

Remarks: (Lit.)

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Toxicity to daphnia static test NOEC - Daphnia magna (Water flea) - 0,17 mg/l -

and other aquatic 21 d

invertebrates (Chronic (OECD Test Guideline 211)

toxicity) Remarks: (in analogy to similar products)

### **Icosane**

Toxicity to bacteria

n-octadecane

Toxicity to fish LC50 - other fish - > 1.028 mg/l - 96 h

(OECD Test Guideline 203) Remarks: No data available

Toxicity to daphnia

and other aquatic invertebrates

EC50 - other microorganisms - > 3.000 mg/l - 48 h

(ISO 14669 and PARCOM method)

Toxicity to algae EC50 - Skeletonema costatum (marine diatom) - > 10.000

mg/l - 72 h (ISO 10253)

# CHEMIKART

# **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

No data available

# **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 1262 IMDG: 1262 IATA: 1262

14.2 UN proper shipping name

ADR/RID: OCTANES IMDG: OCTANES IATA: Octanes

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user

Tunnel restriction code : (D/E)

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Further information : No data available

# 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

# **SECTION 15: Regulatory information**

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

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

P5c

# **National legislation**

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

FLAMMABLE LIQUIDS

E1 ENVIRONMENTAL HAZARDS

E1 ENVIRONMENTAL HAZARDS

P5c FLAMMABLE LIQUIDS

# Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

# 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**

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM -American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Classification of the	e mixture	Classification procedure:	
Flam. Liq.2	H225	Based on product data or assessment	
Skin Irrit.2	H315	Calculation method	
STOT SE3	H336	Calculation method	
Asp. Tox.1	H304	Calculation method	
Aquatic Acute1	H400	Calculation method	
Aquatic Chronic1	H410	Calculation method	

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### **Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. 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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